THE REPORT

OF THE

PRESIDENT

OF

QUEEN'S COLLEGE, CORK,

FOR

THE YEAR ENDING 31st MARCH, 1868;

TOGETHER WITH APPENDICES A TO K INCLUSIVE.

Presented to both Houses of Parliament by Command of Her Majesty.

DUBLIN:
PRINTED BY ALEXANDER THOM, 87 & 88, ABBEY-STREET,
FOR HER MAJESTY'S STATIONERY OFFICE.
1868.

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THE REPORT

OF THE

PRESIDENT OF QUEEN'S COLLEGE, CORK,

FOR

THE YEAR ENDING 31ST MARCH, 1868.

TO THE QUEEN'S MOST EXCELLENT MAJESTY.

MAY IT PLEASE YOUR MAJESTY,

In accordance with the requirements of the Act of Parliament, and of the Charters of the Queen's Colleges, I have the honour to submit the following Report of the Progress and Condition of this College for the year ending 31st March, 1868.

1. EXAMINATIONS FOR ENTRANCE—NUMBERS AND CLASSIFICATIONS OF STUDENTS.

The Entrance Examinations for the Session now current were held in October, 1867, on the several days as arranged by the College Council. The regulations on the subject are given in the Prospectus for the Session of which a copy is annexed, forming Appendix A.

After those examinations 79 new Students were entered as Matriculated Students to the First Year's Class, as were also 9 who had already attended some classes as Non-matriculated Students, and had now passed the examinations, making 88 of new Matriculated Students. Further, 16 Students who had previously matriculated, but who from not having been promoted, or from other reasons, had resumed the studies of the first year, being added to the above, made the total number of Students in that class in the current Session 104.

In addition to the above, there presented themselves to proceed with the studies of the senior years, 131 students who had passed the Sessional Examination at the close of the previous academic year. The total number of Matriculated Students attending the College during the current Session is, therefore, 235.

Besides the above 235 Matriculated Students, there entered to attend the lectures of particular professors 12 Non-Matriculated Students, making the total number of Students in attendance in the College during this Session to be 247.

Those Students are classified according to their collegiate standing in the following table, which also shows, for sake of comparison, the similar return for the preceding Session.

Courses of Study in order of College standing.		Session, 1866-67.	Session, 1867-68.
Matriculated Students,	Course of First Year,	85	104
	Course of Second Year,	43	52
	Course of Third Year,	52	41
	Course of Fourth Year,	27	32
	Special Courses,	7	6
Total number of Matriculated Students,		214	235
Non-Matriculated Students,		16	12
Total number of Students,		230	247

In regard to Faculties and courses of studies for University Diplomas and Degrees, the Classification of Students who attended the College during the present Session (1867-68) was as follows:—

	Matriculated.	Non-Matriculated.	Total.
In the Faculty of Arts,	66	2	68
In the Faculty of Law,	15	–	15
In the Faculty of Medicine,	140	10	150
In the Faculty of Engineering,	28	–	28
Total,	249	12	261

This total number exceeds that given above as the total number of Matriculated Students by 14, as so many had entered more than one Faculty to attend lectures in this Session. There thus entered in the Faculties of—

Arts and Law,	6
Arts and Medicine,	7
Medicine and Law,	1
Making total	14

The ages of the new Students entered for the Session 1867-68, were as follows:—

14 Years,	1	18 Years,	13	No return from those already in College as Non-Matriculated,	9
15 Years,	4	19 Years,	9		
16 Years,	15	20 Years,	9		
17 Years,	14	21 Years and over,	14	Total,	88

Of the total number of Matriculated Students (235) on the roll for the Session 1867-68, there were 164 under 21 years of age, and 71 were 21 years of age and upwards.

2. College Examinations for Sessional Promotion of Students from the Session 1866-67, and for Scholarships in the Session 1867-68.

The Examinations for Sessional Promotion were held at the end of the Session of 1866-67, with the results shown in the following table:—

Faculty.	Promoted.	Not Promoted.	Total.
Arts,	41	13	54
Law,	7	–	7
Engineering,	26	13	39
Total,	74	26	100
Fourth Year's Arts, Not requiring Promotion,			4
Faculty of Medicine,			117
Total,			221

Those examinations were conducted by means of printed papers, of which a selection is given in Appendix B, and prizes were awarded to those Students who were specially recommended to the College Council by the examining Professors. The names of the Students who received Sessional honors and prizes are given in Appendix C.

The Examinations for Scholarships were held in the commencement of the Session of 1867-68, as usual, under the direction of the College Council, with the following results.

Of the 7 Senior Scholarships in Arts 6 were awarded.
The Senior Scholarship in Law was awarded.
Of the 30 Junior Scholarships in Arts 21 were awarded.
Of the 8 Scholarships in Medicine 5 were awarded.
Of the 3 Junior Scholarships in Law all were awarded.
Of the 5 Scholarships in Engineering all were awarded.

The Examinations for these Scholarships were conducted principally by printed papers. The subjects of examination are described in the Prospectus (Appendix A), and the more important papers of questions are given in Appendix D.

3. Courses of Instruction.

The particulars of the Classes, the numbers of lectures delivered by each Professor, and the number of Students attending each class in the Session 1864-65, are given in the Table, Appendix E, and further details as to the special departments will be found in the Reports of the Professors annexed, forming Appendix F.

4. Queen's University Examinations and Peel Exhibitions.

The Students who had completed their collegiate courses were recommended to the Senate of the Queen's University to be examined for their respective Diplomas and Degrees. The names of those Students of Queen's College, Cork, who obtained Degrees or Diplomas at the University Examinations in June and October, 1867, and also those who obtained University honors at those Examinations, are given in Appendix G.

At the close of the First University Examination in Arts in October, 1867, 8 Students passed, of whom 3 passed with first-class, and 5 with third-class honors, and in the department of Engineering 2 passed, 1 with first-class honors, and one unclassed.

The following Exhibitions from the Peel Endowment Fund were awarded at those examinations to Students of Queen's College, Cork:—

Joseph O'Brien, first, obtained £20 per year for two years.
Thomas Rearden, second, obtained £15 per year for three years.

5. Competitive Examinations and Civil Service Appointments. Special College Prize.

At the Competitive Civil Service Examinations held in 1867, the following Students of Queen's College, Cork, obtained appointments in the public service:—

Thomas Horan, Civil Service, India.
John O'Driscoll, Student Interpreter in China, India, and Japan.
James M'Martin, Public Works, India.
Robert Rings, do. do.
Francis Martin, do. do.
Robert D. Corbett, 1st place, Army Medical Service.
Frederick Lyon, Army Medical Service.
John Newman, do. do.
John Barry, do. do.
Roslewin Morgan, do. do.
Hickman Morgan, do. do.
Mathew W. Galway, do. do.
Edward Fitzgerald, do. do.
Mark Anthony, do. do.
William H. Garde, do. do.
Michael Molony, Irish Record Office.

6. Library and Museums.

The special Report of the Librarian will be found in Appendix I; and for explanations of the condition and progress of the several Museum departments, reference may be made to the Reports of the Professors (Appendix F), to whose charge those special departments are committed.

7. Finance of the College.

I have the honour to annex copies of the College accounts as annually furnished to the Audit Office by the Bursar of the College, and also of the mode of distribution of the Parliamentary Grant for the year closing 31st March, 1868, forming Appendix K, Nos. 1 and 2.

8. Conduct and Discipline of the Students.

I have to report that during the past year the conduct of the Students of Queen's College, Cork, has been very satisfactory, no breach of discipline requiring the notice of the College Council having occurred. In reference to the moral and religious conduct of the Students under 21 years of age resident in Licensed Boarding Houses, I have the honour to submit the Reports of the Deans of Residences, forming Appendix L.

With respect to the proportions of the several religious denominations of the Students recently entered, the following table gives the numbers for the last and the current Sessions:—

RELIGIOUS DENOMINATIONS.	1867–68.			1866–67.		
	Matriculated.	Non-Matriculated.	Total.	Matriculated.	Non-Matriculated.	Total.
Roman Catholic, . . .	32	3	35	30	7	37
Anglican, ...	40	6	46	24	9	33
Presbyterian, . . .	3	–	3	2	–	2
Wesleyan, ...	2	–	2	2	–	2
Other Minor Denominations,	2	–	2	2	–	2
Total, . . .	79	9	88	60	16	76

The following table gives the religious denominations of all the. Students now in attendance at Queen's College, Cork (Session 1867-68) to 31st March, 1868:—

Religious Denominations.	Matriculated.	Non-Matriculated.	Total.
Roman Catholic, . .	107	4	111
Anglican, . . .	110	8	118
Presbyterian, . .	7	–	7
Wesleyan, . . .	8	–	8
Other Denominations, .	3	–	3
Total, . . .	235	12	247

The increase of Matriculated Students in the current Session over that of the last is, therefore, 21, and on the whole body of Students is 17.

Signed,

ROBERT KANE,

President of Queen's College, Cork.

Queen's College, Cork,
May, 1868.

APPENDIX.

APPENDIX A.

Appendix A

General Regulations of College, &c.

General Regulations of the College.—List of Officers.—Programme of Courses for Matriculation and Scholarship.—Hours of Lecture.—Courses for the Public Service and Competitive Examinations.—Queen's University Examinations.

Queen's University in Ireland—Queen's College, Cork.

Faculties of Arts, Medicine, and Law.—Session 1868–69.

President—Sir Robert Kane, F.R.S., M.R.I.A.

Vice-President—John Ryall, LL.D.

Professors.

The Greek Language,	John Ryall, LL.D.
The Latin Language,	Bunnell Lewis, M.A., F.S.A.
Mathematics,	Charles Niven, B.A.
Natural Philosophy,	John England, M.A.
History and English Literature,	William Rushton, M.A.
Logic and Metaphysics,	George Sidney Read, M.A.
Chemistry,	John Blyth, M.D.
Natural History,	Joseph Reay Greene, B.A., M.D.
Geology and Mineralogy,	Robert Harkness, F.R.S.S.L. & E., F.G.S.
Modern Languages,	Raymond de Vericour, M.A.
Jurisprudence and Political Economy,	Richard Horner Mills, M.A.
English Law,	Michael Barry, M.R.I.A.
Anatomy and Physiology,	J. Henry Corbett, M.D., L.R.C.S.I.
Medicine,	Denis C. O'Connor, B.A., M.D.
Surgery,	William K. Tanner, M.D., F.& L. R.C.S.I.
Materia Medica,	Purcell O'Leary, B. es L., M.A., M.D., F.B.S.
Midwifery,	Joshua R. Harvey, B.A., M.D.
Engineering,	Alexander Jack, M.A.
Celtic Languages,	Owen Connellan, Esq.

Officers.

Registrar,	Robert John Kenny, Esq.
Bursar,	Edward M. Fitzgerald, Esq.
Librarian,	Matthias O'Keeffe, M.A., M.D.

The College Session, 1868–69.

The *First Term* will commence on the 20th of October, 1868, and end on the 19th of December.

The *Second Term* will commence on the 4th of January, 1869, and end on the 20th of March.

The *Third Term* will commence on the 5th of April, 1869, and end with the Session, on the 12th of June.

Subjects of the Matriculation Examinations.

For the Faculties of Arts, Medicine, and Law.

Greek:

Grammar.

Any one of the following Authors which the Candidate may select:—

Homer—Iliad, Books I. and II.
Xenophon—Anabasis, Books I. and II.
Lucian—Walker's Selections.

Latin:

Any one of the following Authors which the Candidate may select:—

Virgil—Æneid, Books I. and II.
Sallust—Conspiracy of Catiline.
Cæsar—Gallic War, Book I.

English:

Grammar—

(1.) The principles of Etymology and Orthography.
(2.) The leading Rules of Syntax.

Composition, and writing from dictation.

Outlines of Grecian History to the death of Alexander the Great.
Outlines of Roman History to the accession of Augustus.
Outlines of Ancient and Modern Geography.

Mathematics:

Arithmetic—Principles of Notation. Vulgar and Decimal Fractions. Definition of the terms, Ratio and Proportion. The Rule of Proportion, with its commercial applications, including Simple Interest.

Algebra—Explanation of the signs and meaning of an Index. Calculation of the values of Algebraical Expressions, when particular values are given to the letters which they involve.

Euclid—Book I., with the definitions and axioms.

N.B.—The Easter Recess for the Medical Faculty will commence on the Tuesday before Easter, and end on Easter Monday.

For the Department of Civil Engineering.

The outlines of Modern Geography; Grammar.

Mathematics—Arithmetic, Principles of Notation, Vulgar and Decimal Fractions, with the reasons of the different rules. Rule of Proportion, with its commercial applications; Extraction of the Square Root, both of whole numbers and decimals.

Algebra—Explanation of the signs and meaning of an Index, calculation of the value of Algebraic expressions, when particular values are given to the letters which they involve.

Euclid—Books I., II., III., IV., and VI., with the definitions of Book V.

Matriculated Students.

Persons intending to become *Matriculated* Students of the College, in any of the Faculties or Departments of Faculty, are required to pass the Matriculation Examination, whereby they are declared competent to pursue the course of study prescribed to Students in that Faculty or Department of Faculty, and, on completing this course, are entitled to become Candidates for the Degrees or Diplomas granted by the Queen's University in Ireland.

The Examination for the Matriculation *of Students in the several Faculties and Departments of Faculty, will commence at Ten o'clock, on Tuesday, the 20th of October*, 1868.

Candidates for Matriculation are required to forward their names to the Registrar of the College, and to state the Faculty or Department of Faculty for which they propose to matriculate, at least *three days* before the commencement of Matriculation Examinations. *Appendix A,*

General Regulations of College, &c.

Each Candidate, before being admitted to the Matriculation Examination, is required to pay the Bursar of the College the *College Fees* for the year, amounting to 10*s.* for each Faculty or Department of Faculty. These fees will be returned to such Candidates as may fail in passing the Matriculation Examination.

After passing the Matriculation Examination, and before receiving a Certificate thereof, or joining the several Classes, each Student is required to pay the Bursar of the College the whole of the *Class Fees* for the Session.

The Lectures in Arts and Engineering commence October 26th, and those in Medicine, November 2nd.

One moiety of the *Class Fees* for the Session is returned to Junior Scholars; but this exemption is not to extend to the Fees of any Honor Lectures attended by them out of the order of studies laid down in the Curriculum.

In order to encourage the study of French by Candidates for Matriculation, a prize of £5 will be offered for competition in that language, to such Students as, at the opening of Session 1868–69, shall have passed the Matriculation Examination for the first time.

Matriculated Students are required to wear an academic dress.

In May and June are held General Examinations in the subjects lectured upon during the Session; and a sum of One Hundred Pounds is awarded in Prizes to the most distinguished Students.

Students who have pursued part of their studies in any one of the Queen's Colleges, or in any University capable of granting Degrees in the several Faculties of Arts, Law, and Medicine, are permitted, on passing the prescribed Examinations, to take corresponding rank in this College, and also to compete for Scholarships of the corresponding year; providing they shall not hold at the same time a Scholarship or other office of emolument in any University or College of a University.

UNIVERSITY PRIZES.

Two Prizes for English Prose Composition, and two for Geometry, have been founded in each of the Queen's Colleges, to be awarded annually at entrance—First Prize for English Prose Composition, £3 worth of Books; Second ditto, £2 worth of Books. First Prize for Geometry,* £3 worth of Books; Second ditto, £2 worth of Books.

NON-MATRICULATED STUDENTS.

Gentlemen who do not propose, or are not prepared, to matriculate, but who wish to avail themselves, in other respects, of the advantages offered by the College, are permitted to attend the Professors' Lectures, without passing any of the Examinations, on paying to the Bursar the regulated Class Fees, amounting generally to £2 for each course, and College Fee of 5*s.* for the Session; but they cannot become Candidates for Scholarships or Prizes, or enjoy the other privileges of Matriculated Students. They are, however, entitled to the use of the Library, on subscribing the Library Regulations, and paying a fee of 15*s.* for each Session; and the Professors are authorized to recommend to the Council to grant Certificates of Honor to the most distinguished of them in their respective Classes.

EAST INDIA CIVIL SERVICE.

The attention of parents and guardians is directed to the new arrangements for the East India Civil Service; according to which Writerships are open to competition at Examinations prescribed by the Board of Control. The course of Lectures in the Queen's College, Cork, are well adapted to prepare Candidates for this Examination, which includes the following branches of knowledge, their relative importance being indicated by the annexed scale of marks.

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* 1st, 2nd, 3rd, 4th, and 6th Books of Euclid, with Deductions, together with the Definitions of the 5th Book.

Appendix A.

General Regulations of College, &c.

English Language and Literature:

Composition,	500
English Literature and History, including that of the Laws and Constitution,	1,000
	1,500
Language, Literature, and History of Greece,	750
" " " Rome,	750
" " " France,	375
" " " Germany,	375
" " " Italy,	375
Mathematics, pure and mixed,	1,250
Natural Sciences—that is, Chemistry, Electricity, and Magnetism, Natural History, Geology, and Mineralogy,	500
*** No candidate will be allowed to be examined in more than three of the branches of knowledge included under this head, and the total (500) may be obtained by adequate proficiency in any three.	
Moral Science—that is, Logic, Mental and Moral Philosophy,	500
Sanscrit Language and Literature,	375
Arabic Language and Literature,	375
	7,125

LIBRARY AND MUSEUM.

The Library and Museum are open, under certain regulations, to all the Students.

FACULTY OF ARTS.

LECTURES.

The Lectures of the several Professors in this Faculty will commence on Monday, the 26th of October, 1868, except those on the "English Language" and on "Logic," which will not be delivered until the commencement of the Second Term.

SCHOLARSHIPS.

The Examinations for Scholarships will commence on Thursday, the 22nd of October.* The College Council are empowered to confer, at these Examinations, Eight Senior Scholarships of the value of £40 each, and Forty-six Junior Scholarships, viz.:—Fifteen in Literature, and Fifteen in Science, of the value of £24 each; Eight in Medicine, value £25 each; Three in Law, and Five in Civil Engineering, of the value of £20 each—and if competent Candidates present themselves, these Scholarships will be awarded to the most deserving. The Scholarships are tenable for one year only, except the Second Year's Scholarships in Arts, which are tenable for two years, on condition that the Scholar shall pass with Honors the "First University Examination," and shall attend, during the third Session, at least two of the Courses of Lectures prescribed by the University for attendance during that Session, as a qualification for the Degree of B.A., and shall pass the Sessional Examinations in these subjects; but the Scholars of each year are, at its expiration, eligible to become Candidates for the Scholarships of the succeeding year. A Scholarship, however, of the same year in the same Faculty, cannot be held twice by the same Student.

The Scholarships of the first year are open to all Students of the respective Faculties who have passed the Matriculation Examination. Those of the second

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* See Programme of Scholarship Examinations, page 16.

Appendix A.

General Regulations of College, &c.

and fourth years in Arts, and those of second, third, and fourth years in Medicine and Law, and of the second and third in Engineering, are open to all Students who have passed the Examinations, and attended the Lectures prescribed in the preceding part of their Course of Study.

If any Student be placed, at the Examination for Junior Literary and Science Scholarships, first on both the lists of Candidates, he will be entitled to a Scholarship of each Division; but in no other case will the same Student be permitted to hold two Scholarships.

No Student is entitled to become a Candidate for a Scholarship, or Prize, until he shall have paid the COLLEGE AND CLASS *Fees for the current Session. To be paid on or before the day previous to the Examination.*

The Scholarship endowment is paid by Quarterly Instalments, and its tenure is dependent on the Scholar's performance (so far as required by the Council) of the duties prescribed by the Statutes. These duties are, to take charge of the Class-Rolls, to Register the attendance of the Students, to assist the Professors, &c.

If the Scholar be not obedient to the orders of the Council, be removed from the College, or, by non-attendance on Lectures, fail to keep the terms required for promotion, he forfeits his Scholarship.

The Scholar in the Faculty of Medicine must attend, during the year of his appointment, the classes recommended for his year of study in the order of the following Curriculum:—

FIRST YEAR.

Anatomy and Physiology.
Chemistry.
French or German.
Natural Philosophy.
Zoology and Botany.

SECOND YEAR.

Anatomy and Physiology.
Materia Medica.
Practical Anatomy.
Practical Chemistry.

THIRD YEAR.

Surgery.
Midwifery.
Practical Anatomy.

FOURTH YEAR.

Practice of Medicine.
Medical Jurisprudence.

JUNIOR SCHOLARSHIPS.

Subjects of Examination for Literary Scholarships of the First Year.

The Greek Language:

Homer—The Iliad, Books I., II., III., IV., V., and VI.
Euripides*—The Medea.
Herodotus—The Second Book.
Xenophon—The Anabasis, Books I., II., III.
Lucian—Walker's Selections.
Greek Prose—Re-translation of short sentences from English into Greek.

The Latin Language:

Virgil—First Six Books of the Æneid, the Georgics.
Horace—First Two Books of the Odes, the Satires, and the Epistles, Books I., II.
Cicero—De Senectute, De Amicitiâ.
Sallust—Conspiracy of Catiline, and Jugurthine War.
Cæsar—The Gallic War, Books V., VI.
Latin Prose—Re-translation from English into Latin, of portions of Cicero.
N.B.—The Examination in Greek and Latin will be conducted partly *vivâ voce*, and partly by printed questions.

The English Language:

Original Essays on subjects proposed by the Examiner. The Principles of English Grammar. The Laws of Etymology and Orthography. Craik's Outlines of the History of the English Language.

History and Geography:

Grecian History to the Death of Alexander the Great.
Roman History to the Accession of Augustus.
Outlines of Ancient and Modern Geography.

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* For Sessions 1869-70, the *Phœnissæ* of Euripides will be substituted for the *Medea*.

General Regulations of College, &c.

Subjects of Examination for Literary Scholarships of the Second and Third Years.

The Greek Language:

Homer—Iliad, Books VII. to X. inclusive.
Demosthenes—Olynthiac Orations.
Æschylus.
Euripides—Orestes.
Plato—Crito.
An unprepared passage in prose or verse. Composition in prose and verse.

The Latin Language:

Virgil—Eclogues and Æneid.
Horace.
Terence—Heauton Timorumenos.
Cicero—Tusculan Disputations.
,, De Oratore.
Juvenal—Satires, I., III., VIII., X., XIII., XIV.
Livy—Book IV.
Tacitus—Histories, Book I.
Composition in prose and verse.

The English Language:

Craik's Outlines of the History of the English Language.
History of English Literature. Text-book, Chambers' Cyclopædia of English Literature, Vol. I., pp. 85–145.
Shakespeare's Julius Cæsar.
,, King John.

The French Language:

Molière—L'Avare; Le Misanthrope.
Lafontaine—Fables.
Histoire de la Littérature Française, par Demogeot.
Translation from English into French.

Subjects of Examination for Science Scholarships of the First Year.

Arithmetic:
Mensuration of rectilineal figures and of the circle.

Algebra:
The Solution of Simple and Quadratic Equations with one or more unknown quantities. Easy questions in the application of Algebra to Geometry. Arithmetical and Geometrical Progressions. The nature of Logarithms.

Euclid:
Books I., II., III., and IV., with deductions.

Trigonometry:
Definitions of the Sine, Tangent, &c., of an angle. The easier analytical formulæ. The Solution of Plane Triangles, with demonstrations. Nature and Use of the Tables.

Subjects of Examination for Science Scholarships of the Second and Third Years.

The Higher Arithmetic, with Mensuration:

Algebra:
The Solution of Equations with one or more unknown quantities. Elimination. Theory and use of Logarithms. Theory of Equations. Binomial and Exponential Theorems. Compound Interest and Annuities.

Geometry:
Euclid, Books I., II., III., IV., VI., with deductions. Analytical Geometry.

Trigonometry:
The Solution of Plane Triangles, with demonstrations of the formulæ. Theorems relating to single arcs. Theorems relating to the sums and differences of arcs. Application to heights and distances.

Subjects of Examination for Engineering Scholarships of the First Year.

Arithmetic: Mensuration: Algebra: Euclid: Trigonometry:	As for Science Scholarships of the First Year.

General Regulations of College, &c.

Subjects of Examination for Engineering Scholarships of the Second Year.

Mathematics:

The same as for Science Scholarships of the Second Year, except that Spherical Trigonometry will be substituted for Analytical Geometry.

French:

Demogeot—Histoire de la Littérature Française.
Translation from English into French.

Chemistry:

Laws of Combination and Affinity—Preparation and Properties of the Chief Organic Substances—Metallurgic Operations—Mortars and Cements.

Geometrical Drawing:

Descriptive Geometry—Orthographic Projection—Isometric Projection—Perspective—Geometry of Oblique Bridge.

Subjects of Examination for Engineering Scholarship of the Third Year.

Mathematics:

Algebra—Theory of Equations and Methods of Approximation. Elimination. Summation of Series. Binomial and Exponential Theorems. Scales of Notation, &c.

Trigonometry—Plane and Spherical, with Astronomical applications.

Analytical Geometry, and Geometrical Conic Sections.

Differential Calculus—involving demonstrations of the rules for differentiating Algebraic, Circular, and Exponential Functions, founded upon a clear statement of the nature of Limits and Definition of a Differential coefficient. Taylor's and Maclaurin's Theorems. Maxima and Minima. Criteria of the same, with proofs, Equation of Tangent, Normal, Evolute, &c.

Integral Calculus, including more particularly Rational Fractions, Binomial Differentials, Areas of Curves, Rectification of Curves, Cubature of Solids of Revolution.

Natural Philosophy:

Newth's Mechanics.
Ganot—Traite de Physique—Books VI., VII., VIII., IX.

Geology and Mineralogy.

Civil Engineering:

Instruments used by the Civil Engineer. Their Adjustments and use. Surveying. Levelling.

SENIOR SCHOLARSHIPS.

Seven Senior Scholarships are appropriated to the Faculty of Arts, for proficiency in Special Departments of Study, and will be conferred, by examination, on the most deserving of the Graduates of the Queen's University, in the Faculty of Arts, of less than two years' standing.

One in Ancient Languages, Literature, and History of Ancient Greece and Rome.

One to Modern Languages, Literature, and History, viz., English Language, Literature, and Composition; European and English History; the French Language, with German or Italian.

One to Mental and Social Science, viz., Logic, Metaphysics, and Political Economy.

One to Mathematics, viz., Pure Mathematics.

One to Natural Philosophy, viz., Experimental Physics, and Mixed Mathematics.

One to Chemistry, viz., Theoretical and Practical Chemistry.

One to Natural History, viz., Zoology and Botany, Geology, and Physical Geography.

For Senior Scholarship in Law, see page 26.

Appendix A.

General Regulations of College, &c.

SUBJECTS OF EXAMINATION

For the Senior Scholarships in the Greek and Latin Languages, and Ancient History.

The Greek Language:

Plato—Republic, Book X.
Together with the subjects for the B. A. Honor Examination at the University.
Composition in Attic Prose and Iambic Verse.
Greek Literature and History.

The Latin Language:

Virgil.
Horace.
Lucretius, Books I., II.
Ovid—Fasti, Book I.
Persius.
Terence—Andria and Heauton Timorumenos.
Plautus—Capteivei and Pseudolus.

Cicero—De Oratore.
,, Tusculan Disputations.
,, Ad Atticum, Books I., II.
,, Actiones Verrinæ.
Livy—Books IV. and XXII.
Tacitus—The Annals, Books I. to IV., inclusive.

Composition in Prose and Verse.

For Senior Scholarships in Modern Languages and History.

The French Language:

Lavallée—Histoire des Français.
Histoire de la Littérature Française, par Demogeot ou Nisard.

The German Language:

National-Literatur, von A. F. Vilmar.
Schiller's Maria Stuart.
Goethe's Ephigenie.

Translation from English into one of the above Languages.

English:

Language, Literature, and Composition.
History—Hallam's Middle Ages.
Chap. II., Part 1, The Feudal System.
Chap. VIII., Part 1, The Anglo-Saxon Constitution.
Chap. VIII., Part 2, The Anglo-Norman Constitution.
Chap. VIII., Part 3, The English Constitution.

The Italian Language:

Tasso—Gerusalemme Liberata—first five Cantos.
Dante's Inferno—Italian Literature, published by Messrs. Chambers.
Translation from English into French, German, or Italian.

For the Senior Scholarship in Mathematics.

The subjects of previous Examinations (for which see page 14), with the following additions:—

Analytical Geometry of Three Dimensions.
Differential Equations.

For the Senior Scholarship in Natural Philosophy.

Duhamel—Mécanique.
Brinkley—Elements of Astronomy, including the Appendix.
Parkinson's Optics.

For the Senior Scholarship in Mental and Social Science.

The subjects discussed in the Lectures of the Professors, with the following additions:—

Metaphysics and Logic:

Sir William Hamilton's Philosophical Essays and Notes on Reid.
Mill—System of Logic, Book III. to the end of Volume I.

Political Economy:

Principles of Political Economy, by John Stuart Mill.
Taxation and Funding, by M'Culloch—third edition, 1863.

The value attached to the subjects will be in the following proportions, viz.:—

Metaphysics and Logic,	60
Political Economy,	40

Appendix A.

General Regulations of College, &c.

For the Senior Scholarship in Chemistry.

Chemical Physics (in Miller's Chemistry).

Inorganic Chemistry:

General principles of Chemical Philosophy. Crystallography. Chemistry of the Metals. Constitution of Salts. Metallurgy.

Organic Chemistry:

Ultimate analysis of Organic Bodies. Empirical and Rational formulæ. Determination of the density of Vapours. Law of Substitution. Homologous Series. Chemical Types. Gerhardt's Views. Preparation and Properties of the Alcohol Series and their Derivatives. Cyanogen, its Compounds and Derivatives. Organic Bases of Artificial Origin.

Practical Chemistry:

The Analysis of Mixtures, containing two or more Acids and Bases.

For the Senior Scholarship in Natural Science.

The Lectures of the Professors.
Huxley—Elements of Comparative Anatomy.
Mill's Logic, Book IV.
Lyell's Elements and Principles.

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1. COURSE FOR THE DEGREE OF BACHELOR IN ARTS.*

Candidates for the Degree of Bachelor of Arts are required—

1. To have been admitted Matriculated Students of the Queen's University in the Faculty of Arts.
2. To have subsequently studied in one of the Colleges of the Queen's University the Course herein prescribed.
3. To have passed the University Examinations herein prescribed.

The Course for the Degree of Bachelor in Arts shall extend over three Sessions, and shall comprise attendance on the following curriculum:—

FIRST SESSION.

English (One Term).
Greek.
Latin.
A Modern Continental Language.
Mathematics (First Course).

SECOND SESSION.

Logic (One Term).
Natural Philosophy.

Along with any two of the following:—

Greek (Second Course).
Latin (Second Course).
Modern Continental Languages (Second Course).
Mathematics (Second Course).

THIRD SESSION.

English Language and Literature.
Metaphysics, or History, or Political Economy (Two Terms).
Chemistry.
Zoology, or Botany.

Attendance on these Courses shall, in all cases, be understood to include passing such examinations as may be appointed by the College Council, and the catechetical parts of the Courses of Lectures.

Candidates for the Degree of Bachelor of Arts shall reside at their respective Colleges during at least the first two terms of each Session, but may be exempted from residence during the third term by a special grace of the College Council.

Third year's Students may substitute attendance on one or on two Courses of Honor Lectures, for a like number of the Courses above set down for study in the third Session.

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* His Royal Highness the Commander-in-Chief has approved of Graduates of the Queen's University being in future exempted from the usual Examination for direct Commissions; and also of the First University Examination being accepted in lieu of that for the Royal Military College, Sandhurst.

Appendix A.

General Regulations of College, &c.

Candidates for the Degree of Bachelor in Arts shall pass two University Examinations—a Preliminary and a Degree Examination.

The Course for the Preliminary Examination shall include Greek, Latin, a Modern Continental Language, and Mathematical Science. Students who have completed their second Session must pass this Examination before rising to the third year, unless prevented by illness or other inevitable accident, in which case the Senate may admit them to a Supplementary Examination.

Candidates who have completed the Undergraduate Course, may offer themselves at the Degree Examination for graduation either with Honors or without Honors.

If they seek to graduate with Honors, they may select for their Examination any one of the following groups:—

Greek and Latin.
Modern Continental Languages.
Mathematical Science.
Experimental Science.
Natural Science.

Or any three of the following:—

English Language and Literature.
Metaphysics.
History.
Political Economy.
Logic.

Candidates who seek the Degree without Honors, may select for their Examination any group of the subjects from the following lists, provided the sum of the numbers attached in this list to the selected subjects be at least four:—

English Language and Literature,	2	Latin,	1
Mathematical Science,	2	Each Modern Continental Language,	1
Experimental Physics,	2	Logic,	1
Chemistry,	2	Metaphysics,	1
Zoology,	1	History,	1
Botany,	1	Political Economy,	1
Greek,	1		

English Composition will form a part of all University Examinations.

2. COURSE FOR THE DEGREE OF MASTER IN ARTS.

Bachelors in Arts of one year's standing, may offer themselves for Examination for the Degree of Master in Arts, and may select for their Examination any one of the following groups:—

Greek and Latin.
Modern Continental Languages.
Mathematical Science.
Experimental Science.
Natural Science.

Or any three of the following:—

English Language and Literature.
Metaphysics.
History.
Political Economy.
Logic.

This Ordinance supersedes former Ordinances prescribing the curriculum for the Degree of Master in Arts.

3. COURSE FOR THE DIPLOMA OF LICENTIATE IN ARTS.

A Diploma conferring the title of Licentiate in Arts of the Queen's University in Ireland, shall be granted to Candidates who comply with the following regulations:—

Candidates for this Diploma are required—

1. To have Matriculated in the Queen's University.
2. To have pursued in one of the Colleges of the Queen's University the Course herein prescribed.
3. To have passed the University Examination herein prescribed.

The Course for the Diploma of Licentiate in Arts shall extend over two Sessions, and shall comprise attendance on the following curriculum:—

FIRST SESSION.

Two Languages, of which one may be English.
Mathematics.
Another Course on any subject in the annexed list.

SECOND SESSION.

Greek, Latin, or a Modern Continental Language.
Logic (One Term).
Natural Philosophy.
And two other Courses on subjects in the annexed list.

If any of the Courses, except that on Logic, extend over one Term only, some other Course from the annexed list must be attended as a supplement to it, but not necessarily in the same Session.

Credit will not be given for attending the same Course of Lectures a second time.

Attendance on the Courses shall, in all cases, be understood to include passing such Examinations as the College Council shall appoint, and the catechetical parts of the Courses of Lectures.

Candidates for the Diploma of Licentiate in Arts shall reside at their respective Colleges during at least the first two terms of each Session.

After having completed the above curriculum, Candidates for the Diploma shall pass a University Examination in Greek, Latin, or a Modern Continental Language; in Mathematical Science; and in two other subjects selected from the annexed list, viz.:—

The Mathematical Sciences.
The Experimental Sciences.
The Natural Sciences.
Geometrical Drawing.
Mensuration, Levelling, and Mapping.
Anatomy and Physiology.
English Language and Literature
The Modern Continental Languages.
Greek.
Latin.
Logic.
Metaphysics.
History.
Political Economy.

English Composition will form a part of all University Examinations.

Licentiates in Arts who may desire to proceed to the Degree of Bachelor in Arts, may enter directly on the second Session in the Course for this Degree, provided they attend in it, instead of the usual curriculum, all the Courses prescribed for the first two years which they shall not have already attended in the curriculum for the Diploma of Licentiate.*

UNIVERSITY PRIZES.

University Exhibitions in the Faculty of Arts.

Three Exhibitions of £20 a year for three years, three Exhibitions of £15 a year for three years, and two Exhibitions of £10 a year for three years, will be competed for annually in the Faculty of Arts. The three £20 Exhibitions will be awarded to the Candidates who stand foremost in order of merit from each College, at the first University Examination in Arts; and the three £15 Exhibitions to the Candidates who stand second in order of merit from each College: provided that their names appear in the First Class of the Division List at that Examination. Of the two £10 Exhibitions, one will be awarded to the best answerer in Mathematical Science, and the other to the best answerer

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* NOTE.—Degrees in Arts, conferred by the Queen's University in Ireland, are recognised by the University of Durham, by St. Bee's College, Whitehaven, and by St. Aidan's College, Birkenhead, in the case of Theological Students preparing for Holy Orders in the Established Church.

Appendix A.

General Regulations of College, &c.

in the Ancient Classics, at the first University Examination. The £10 Exhibitions are open to the competition of Candidates from all the Colleges, and may be held along with one of the larger Exhibitions.

Each Candidate will be deemed a Student of that College in which he shall have attended the Lectures of the second Session; and no Student will be admitted to the competition who shall have allowed more than one academic year to intervene between the time that he entered upon the studies of the second Session and the time of competition.

The first instalment of each Exhibition will be paid at the time of competition; the second when the Exhibitioner takes the Degree of B.A. in the Queen's University, provided he graduate with honors, and within two academic years; and the third when he takes the Degree of M.A. in the Queen's University, provided he obtain it within three academic years from the time of competition.

University Prizes in Composition, open to the Competition of Graduates and Undergraduates.

Two Prizes for English Prose Composition, one of £10 worth of Books, and the other of £5 worth of Books, have been founded, and are open to the competition of all members of the University who shall not have been graduates for more than three years at the time of competition, and who shall not have already twice obtained one or other of these Prizes.

University Prizes in Composition, open to the Competition of all Undergraduates.

Two Prizes in Composition, one for English Prose, the other for Greek or Latin Prose, and each consisting of £5 worth of Books, have been founded, and are open to the competition of all undergraduates, provided that neither the English nor the Classical Prize be awarded oftener than twice to any Student.

DIPLOMA IN ENGINEERING.

Each Candidate for the Diploma in Civil Engineering is required—

1. To have been admitted a Matriculated Student of the Queen's University in the Department of Civil Engineering.
2. To have studied in the Colleges of the Queen's University the Course herein prescribed.
3. To have passed the University Examinations herein prescribed.

The Course for the Diploma in Civil Engineering shall usually extend over Three Sessions, and shall comprise attendance on the following curriculum:—

FIRST SESSION.

Mathematics (First Course).
Chemistry.
Modern Languages.
Geometrical Drawing.
Office Work.
Mineralogy, Geology, and Physical Geography.

SECOND SESSION.

Mathematics (Second Course).
Experimental Physics.
Civil Engineering.
Office Work.
Field Work.

THIRD SESSION.

Natural Philosophy, applied.
Mathematical Physics.
Civil and Mechanical Engineering.
Office Work.
Field Work.
Engineering Excursions.

Attendance on these Courses shall in all cases be understood to include passing such Examinations as may be appointed by the College Council, as well as the catechetical parts of the Courses of the Lecture.

Engineering Students shall reside at their respective Colleges during at least the first two Terms of each Session, and can be exempted from residence during the third Term also, only by a special grace of the College Council.

The study of the Engineering Curriculum may be extended over more than three Sessions, on the recommendation of the College Council, and under such regulations as the Council shall impose. Some relaxation of the order in which the subjects shall be studied will also be admitted, on the recommendation of the Council.

Candidates will, on the special recommendation of the College Council, be admitted to the Diploma after two years' residence instead of three, if their previous acquaintance with a sufficient group of the subjects above set down for study in the First and Second Session is deemed by the Council satisfactory. In such cases the Certificate of the Council will be accepted in lieu of attendances upon these Courses, but will not exempt Candidates from the University Examinations in them.

In order to obtain this Certificate, Students must have attended previously at least one Session in Arts, or one year in an Engineer's office. On making application to the Council, such Students will be allowed to present themselves, at the time of Matriculation, for examination in the subjects of any four of the eight Courses of Lectures of the first two years. On passing this Examination, they will be allowed to take rank at once as Students of the second year, and will then be required to attend those other four Courses of Lectures only, in the subjects of which they have not passed; but they will not be eligible for the Scholarship of that year.

The application to be admitted to this Examination must be lodged with the Registrar before the first day of the Session, and must state what are the four subjects in which the Students propose to offer themselves for Examination, and must be accompanied by a Certificate of the required attendance of one or more years in Arts or an Engineer's Office.

On passing the Sessional Examinations in the subjects of these four Courses of Lectures which they shall have attended as Students of the second year, they will be promoted to the rank of Students of the third year; and, on completing the regular Course of that year, will be furnished with the Certificate required by the Senate of the University.

The University Examinations shall extend to all the subjects of the above Curriculum. French will, in all cases, be required.

Candidates must present themselves before the close of their Collegiate Course for Examination in the following subjects, viz.:—Mathematics (*First Course*); Experimental Physics; Modern Languages; Geometrical Drawing (including Orthographic projection, Isometric projection, Descriptive Geometry, and Linear Perspective); Mathematics (*Second Course*); Mensuration, Levelling, and Mapping.

The final Examination shall extend to all the subjects of the Engineering Course, in which the Candidate shall not have previously passed. English Composition will form a part of each University Examination.

This Ordinance shall take effect from the first day of January, 1860; Students who shall have entered the Engineering Schools of the Colleges of Queen's University previously, may proceed either under the present Ordinance, or under that hitherto in force.

Exhibitions in the School of Engineering.

Two Exhibitions, one of £20 a year for two years, and the other of £15 a year for two years, will be competed for annually in the School of Engineering. These Exhibitions will be awarded at the first University Examination in Engineering: the £20 Exhibition to the best answerer absolutely, in whichever of the Colleges he may have been educated, and the £15 Exhibition to the Candidate who is first in order of merit of the competitors from the other two Colleges: provided that their names appear in the First Class of the Division List at that Examination.

Each Candidate will be deemed a Student of that College in which he shall have attended the Lectures of the second Session; and no Student will be admitted to the competition who shall have allowed more than a year to intervene between the time that he entered on the studies of the second year and the time of competition.

Appendix A.

General Regulations of College, &c.

The first instalment of each Exhibition will be paid at the time of competition; the other when the Exhibitioner take the Diploma in Engineering of the Queen's University, provided that he takes honors with it, and obtain it within two academic years from the time of competition.

Faculty of Medicine.

Lectures, &c.

The Medical Session will be opened on Monday, 2nd of November, 1868, and the Courses of Lectures will commence as under:—

Anatomy and Physiology—Monday, 2nd November, at One o'clock, to be continued daily, except on Saturdays, at the same hour.

Practice of Medicine—Monday, 2nd November, at Three o'clock, to be continued on Mondays, Wednesdays, and Fridays, at the same hour.

Practice of Surgery—Tuesday, 3rd November, at Four o'clock, to be continued on Tuesdays and Thursdays, at Four o'clock, and Saturdays, at One o'clock.

Materia Medica—Tuesday, 3rd November, at Three o'clock, to be continued on Tuesdays and Thursdays, at Three o'clock; and on Saturdays, at Twelve o'clock.

Medical Jurisprudence—Monday, 2nd November, at Twelve o'clock, to be continued on Tuesdays and Thursdays, at the same hour, and on Fridays at One o'clock.

Midwifery—Monday, 2nd November, at Four o'clock, to be continued on Mondays, Wednesdays, and Fridays, at the same hour.

The Course of **Practical Anatomy** will be conducted by the Professor of Anatomy and Physiology, assisted by Dr. **Shirkwin** and Dr. H. M. **Jones**, Demonstrators.

The **Anatomical Demonstrations** will commence on 2nd of November, and be continued daily at Twelve o'clock, except Saturdays.

Chemistry—Monday, Wednesday, and Friday, at Two o'clock.

Practical Chemistry—Monday, Tuesday, Wednesday, Thursday, and Friday.

Zoology and Botany—Monday, Wednesday, and Friday.

Natural Philosophy—Tuesdays and Thursdays.

Modern Languages—Monday, Wednesday, and Friday.

Subjects of Examination for Medical Scholarships of the First Year.

The Scholarships of the First year in the Faculty of Medicine will be awarded thus:—One to the Candidate who shall have most distinguished himself at the Examination in the course prescribed for Science Scholarships of the First year in Arts, and one to the Candidate who shall have most distinguished himself at the Examination in the course prescribed for Literary Scholarships of the First year in Arts. Candidates for these Scholarships shall have previously declared themselves, and have Matriculated as Medical Students. It is left to their option for which of them they will compete.

Subjects of Examination for Medical Scholarships of the Second Year.

Anatomy and Physiology.	General Physics.
Chemistry.	Zoology and Botany.

The French Language.

Subjects of Examination for Medical Scholarships of the Third Year.

Anatomy and Physiology.	Materia Medica.
Practical Anatomy.	Practical Chemistry.

Subjects of Examination for Medical Scholarships of the Fourth Year.

Anatomy and Physiology.	Pathology and Morbid Anatomy.
Practical Anatomy.	Surgery.
Therapeutics.	Midwifery.

Note.—The 17th of November will be the last day for entering for the Six Months' Courses of Lectures in the above Curriculum. All the Lectures are recognised by the Queen's University in Ireland, by the Universities of London, Glasgow, Aberdeen, and St. Andrew's; the Colleges of Surgeons of Dublin, Edinburgh, and London; by the Apothecaries' Companies, by the Army, Navy, and East India Medical Boards, &c., &c.

DEGREES OF M.D. AND M.CH.*

General Regulations of College, &c.

Each Candidate for the Degree of Doctor in Medicine or Master in Surgery is required—

1st.—To have passed in one of the Colleges of the Queen's University the Entrance Examination in Arts, and to have been admitted a Matriculated Student of the University.

2nd.—To have attended in one of the Queen's Colleges, Lectures on one Modern Continental Language for six months, and Lectures on Natural Philosophy for six months.

3rd.—To have also attended, in some one of the Queen's Colleges, at least two of the courses of Lectures marked with an asterisk. For the remainder of the courses, authenticated certificates will be received from the Professors or Lecturers in Universities, Colleges, or Schools, recognised by the Senate of the Queen's University in Ireland.

4th.—To pass two University Examinations—the First University Examination, and the Degree Examination.

The Curriculum shall extend over at least four years, and shall be divided into periods of at least two years each.

Candidates are recommended to pass the Matriculation Examination, prior to entering on the second period.

It is recommended that the first period shall comprise attendance on the following Courses of Medical Lectures:—

* Chemistry.
* Botany, with Herborizations for practical study, and Zoology.
* Anatomy and Physiology.
* Practical Anatomy.
* Materia Medica and Pharmacy.

And that the second period shall comprise attendance on the following Course of Medical Lectures:—

Anatomy and Physiology (Second Course).
Practical Anatomy (Second Course).
* Theory and Practice of Surgery.
* Midwifery.
* Theory and Practice of Medicine.
* Medical Jurisprudence.

In addition to the above Courses of Lectures, Candidates shall have attended during either the first or second period—

A Modern Continental Language (in one of the Colleges of the University).
Experimental Physics (in one of the Colleges of the University).

Also, during the first period—

Practical Chemistry (in a recognised Laboratory).
Medico-Chirurgical Hospital (recognised by the Senate) containing at least sixty beds, together with the Clinical Lectures therein delivered, at least Two each Week—a Winter Session of Six Months.

And during the second period—

Practical Midwifery, at a recognised Midwifery Hospital, with the Clinical Lectures therein delivered—for a period of Three Months, in an Hospital containing not less than Thirty beds; or six Months, in an Hospital containing not less than Fifteen beds.
Medico-Chirurgical Hospital (recognised by the Senate) containing at least sixty beds, together with the Clinical Lectures therein delivered—Eighteen Months; including either three Winter Sessions of Six Months each, or two Winter Sessions of Six Months each, and two Summer Sessions of Three Months each.

Medical Examinations are held in June, and in September and October.

The June Examinations are Pass Examinations, and commence on the Tuesday following the Second Saturday in June.

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* The regulations under which degrees in Surgery will be conferred on Candidates who graduated in Medicine before the year 1865, may be learned on application to the Secretary of the Queen's University.

Appendix A.
General Regulations of College, &c.

The Honor Examinations commence on the last Tuesday in September, and are followed by Pass Examinations.

Each Candidate for Examination in June must forward to the Secretary, on or before the first of June, notice of his intention to offer himself as a Candidate, along with his Certificates; and each Candidate for Examination in September or October must forward similar notice, along with his certificates.

Exhibitions in the Faculty of Medicine.

Two exhibitions, one consisting of two instalments of £20 each, and the other of two instalments of £15 each, will be competed for annually in the Faculty of Medicine. These exhibitions will be awarded for proficiency in the non-professional part of the first University Examination in Medicine: the £20 exhibition to the best answerer absolutely, in whichever of the Colleges he may have been educated; and the £15 exhibition to the candidate who is first in order of merit of the competitors from the other two colleges; provided that their names appear in the First Class of the Division List at that examination.

Each Candidate will be deemed a student of that College in which he shall have attended the Lectures of the second session; and no student will be admitted to the competition who shall have allowed more than a year to intervene between the time that he entered on the studies of the second year and the time of competition.

The exhibitions in Medicine will be paid in two equal instalments: one at the time of competition; the other when the exhibitioner takes the Degree of M.D. in the Queen's University, provided that he graduate with honors, and within three academic years from the time of competition.

Prize in Composition, limited to the Competition of Undergraduates in Medicine.

A prize of £5 worth of books has been founded, for a thesis on a subject to be prescribed, and is limited to the competition of the Undergraduates in Medicine who shall not have already twice received the prize.

The subjects on which the competitors for composition prizes are to write, will be announced on or before the first of June in each year; the compositions, with fictitious signatures, are to be sent in to the Secretary of the University, on or before the first of the following September, and the successful competitors will be declared at the next Public Meeting of the University.

Hospital Attendance.—Clinical Lectures on Medicine and Surgery are delivered at the North and South Infirmaries, by the Physicians and Surgeons of those Institutions.

	£	s.	d.
Fee for twelve months, ...	8	8	0
Fee for six months, ...	5	5	0
Practical Pharmacy at the same Infirmaries:			
Fee for three months, ...	3	3	0
Clinical Midwifery at the Lying-in Hospital, with Practical Attendance upon Thirty Midwifery cases:			
Fee for six months, ...	3	3	0

Further information may be had from the Medical Officers at the Infirmaries.

FACULTY OF LAW.

LECTURES.

The complete Course for each Class consists of Twenty-four Lectures, by the Professor of English Law, in each Collegiate Session; and of Twenty-four Lectures in each course of the first two years. The Lectures are delivered in the months of December, February, and March.*

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* The following Rules were adopted by the Honorable Society of King's Inns, in Hilary Term, 1862, with reference to attendance on Lectures, as a condition precedent to being called to the Bar, viz.:—

V.—Every Student admitted into the Society after the first day of Trinity Term, One Thousand Eight Hundred and Fifty, if a Graduate of the University of

Appendix A,

General Regulations of College, &c.

LAW SCHOLARSHIPS.

Examination by the Professor of Jurisprudence.

First Year:

Reddie's Inquiries in the Science of Law.
Adam Smith's Wealth of Nations—Book III.
Hallam's Middle Ages—Chap. 8.

Examination by the Professor of English Law.

First Year:

Williams—Principles of the Law of Real Property.

Second Year:—By Professor of Jurisprudence.

The Lectures of the Professor in the First Year (see note).
Sandar's Institutes of Justinian—Introduction.
The Chapters on Social Science in J. S. MILL's Logic—Book VI., Chap. 6, to end of the Book.

By Professor of English Law.

The Lectures of the Professor for the preceding years.
Smith—Manual of Equity Jurisprudence.
Williams—Principles of the Law of Personal Property.
Smith—On Contracts.

Third Year:—By Professor of Jurisprudence.

Ancient Law, by H. S. Maine (omitting latter part of chap. 9, from p. 340).
Sandar's Justinian, and the Lectures of the Professor, in the first and second year.

NOTE.—The following works may be referred to in connexion with the principal subjects discussed in the Lectures on Jurisprudence:—

Dumont's Bentham (translation by Hildreth), "Principles of Legislation," and 1st and 2nd parts of the "Principles of the Civil Code."
Stephens' "Criminal Law."
Mill's "Political Economy"—Chapters on Property, 1 and 2, Book II., and on the Function of Government, 8, 9, 10, 11, Book V.
Mill's "Representative Government."

By Professor of English Law.

The Lectures of the Professor for the preceding years.
Smith—Leading cases on branches of the Law.
Storey—Equity Jurisprudence.

Dublin, Oxford, Cambridge, Durham, or London, or the Queen's University in Ireland, shall, as a condition precedent to being called to the Bar, produce Certificates of his having attended two complete Courses *at least* of Lectures, viz.:—one complete Course of Lectures of any two, at his option, of the four Law Professors—namely, the Law Professors of the University of Dublin, and those of the King's Inns, and *at least* five-sixths of the Lectures of each Session or University Term; or if a Graduate in Arts of the Queen's University in Ireland, shall have the option of producing Certificates of having attended two complete Courses, at least, of Lectures of each of the two Law Professors of any College of the Queen's University, comprising not less than thirty-six Lectures, and at least five-sixths of the Lectures of each Course, and of having passed the Examinations, in the College to which he belongs, on the subjects of the aforesaid two Courses of Lectures, provided that the curriculum prescribed by the said two Courses of Lectures shall embrace all that is contained in the Course now prescribed by the Professors of the King's Inns, or as the same may be from time to time varied by any rules of the Benchers.

VI.—Every Student admitted into the Society after the above date (if not a Graduate of one of the said Universities), shall, as a condition precedent to being called to the Bar, produce Certificates of his having attended four Courses of Lectures, viz.:—One Course of the Lectures of each of the said four Professors, and, *at least*, five-sixths of the Lectures of each Session, or University Term, in such manner, however, that every such Student shall be engaged not less than three years in the study of the Law in Ireland, exclusive of the two years necessary for keeping Terms in England; in every one of which three years, one complete Course of Lectures must be kept; any Student who shall produce Certificates of his having attended during three years the Courses of Lectures delivered by the Professors of English Law and of Jurisprudence, in one of the Colleges of the Queen's University, and of his having passed the General Examinations in such College on the subjects so Lectured on, shall be deemed entitled to such and the same privileges, in respect to his being called to the Bar, as if he had actually attended One Course of the

Appendix A.

General Regulations of College, &c.

The Senior Law Scholarship will be awarded, by Examination, to the most distinguished Student who shall have proceeded in the Course of Arts to the Degree of A.B., and who shall have completed the Course of Legal Study prescribed to Candidates for the Degree of LL.B. in the Queen's University in Ireland.

Examination for the Senior Scholarship in Law.

The Lectures of the Professors and subjects appointed for Scholarship Examination in the preceding years.
Sugden—The Law of Vendors and Purchasers.
Furlong—Law of Landlord and Tenant.
Taylor—Treatise on the Law of Evidence.
Stephen—Treatise on the Principles of Pleading.
Hallam—Constitutional History.
May's Constitutional Law.

DEGREES IN LAW.

Candidates for the Diploma of Elementary Law must have passed a Matriculation Examination[*] (see page 10), and pursued the following

Course of Study for the Diploma of Elementary Law.

First Session—Law of Property and Principles of Conveyancing—Jurisprudence.

The Course of the Professor of English Law for the Class of the First Year, "The Law of Real Property," comprises Elementary Instruction in this branch of Law, and in practical Conveyancing. The text-book read is Williams on "Real Property." The first volume of Stephens' edition of Blackstone's Commentaries, and the second volume of Kerr's edition, are recommended for perusal.

Second Session—Equity and Bankruptcy—Civil Law.

The Course of the Professor of English Law for the Class of the Second Year, "The Law of Personal Property," Equity, and "Bankruptcy," comprise instructions in those branches of law, and in the practical application of Precedents, &c. The text-books read are Williams on "Personal Property," "Smith's Manual of Equity," "The late Statute of Bankruptcy and Insolvency," by Adams. The second volume of Stephens' and Kerr's editions of Blackstone's Commentaries, and Smith's "Mercantile Law," are recommended for perusal.

Third Session—Common and Criminal Law.

The Course of the Professor of English Law for the Class of the Third Year, "Common and Criminal Law," comprises the History, Constitution, and Jurisdiction of the several Courts of Justice; Procedure in Crown and Civil Causes at Law and in Equity, as also in the Local Courts. The text-books are the third and fourth volumes of Blackstone's Commentaries, Stephens' and Kerr's editions, "Broom's Common Law," "Broom's Maxims," "Smith's Leading Cases," and "Copinger's County Courts," are recommended for perusal.

Students intending to proceed for the certificate of the Law Professors, so as to entitle themselves to serve an apprenticeship of four years instead of five, under the Act for amending the several Acts for the regulation of Attorneys and Solicitors (14 and 15 Vict., chap. 88), must enter their names with the Registrar of one of the Queen's Colleges of Cork, Belfast, and Galway, and pay the necessary College and Class Fees to the Bursar before the commencement of the Law Lectures in each Session.

Such Students need not pass the Matriculation Examination, but must attend the Lectures, and pass the College Examinations prescribed for the first and

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Lectures of each of the two Law Professors of the University of Dublin, and had been engaged for two years in such attendance; but this rule and the preceding one are not intended to affect the number of Terms' Commons required by the present Rules of the Society, to be kept by Students of the King's Inns, prior to being called to the Bar.

VII.—If from illness, or other sufficient cause, any Student should be prevented from completing any Course of Lectures necessary towards being called to the Bar, the Legal Education Committee have power to direct what further attendance, if any, shall be sufficient in such case.—*Rules as to Legal Education, No.* 3.

[*] NOTE.—It will be sufficient for such Candidate to have passed his Examination at *any* time previous to applying for the Diploma. By the Act of Parliament, 14 and 15 Vic., cap. 88, it is provided, that every person who, as a Matriculated or

second years, of the course of study for Candidates for the Diploma in Elementary Law.

General Regulations of College, &c.

Candidates for the Degree of LL.B. will be admitted to Examination for that Degree from the Queen's University in Ireland, provided they shall have proceeded to the Degree of A.B., and shall have attended the Lectures and passed the Examinations prescribed for the Diploma of Elementary Law.

Students who have obtained the Degree of LL.B. will, at the expiration of two years after they have obtained the Degree, be admitted to the Examination for the Degree of LL.D. They are examined in the Laws of the Admiralty and Ecclesiastical Courts of England and Ireland, and in International Law.

Books suggested:

Lord Hale's Treatise, De Jure Maris.
Dr. FitzHenry Townsend's statement of the differences in Jurisdiction and Practice between the English and Irish Courts of Admiralty, annexed to the Report of the Royal Commission of Inquiry, 1864.
Rogers' Ecclesiastical Law.
Wheaton's International Law.
'Historicus,' Letters of, on International Law.

Table of Class Fees.

ARTS CURRICULUM.	£	s.	d.
FIRST SESSION.			
English (One Term),	1	0	0
Greek,	2	0	0
Latin,	2	0	0
A Modern Continental Language,	2	0	0
Mathematics (First Course),	2	0	0
College Fee,	0	10	0
SECOND SESSION.			
Logic (One Term),	1	0	0
Natural Philosophy,	2	0	0
Greek (Second Course),	2	0	0
Latin (Second Course),	2	0	0
Modern Continental Languages (Second Course),	1	0	0
Mathematics (Second Course),	2	0	0
College Fee,	0	5	0
THIRD SESSION.			
English Language and Literature,	2	0	0
Metaphysics, or History, or Political Economy (Two Terms), each,	2	0	0
Chemistry,	2	0	0
Zoology or Botany,	2	0	0
College Fee,	0	5	0

ENGINEERING CURRICULUM.	£.	s.	d.
FIRST SESSION.			
Mathematics (First Course),	2	0	0
Chemistry,	2	0	0
Modern Languages,	2	0	0
Geometrical Drawing,	2	0	0
Office Work,	2	0	0
Mineralogy, Geology, and Physical Geography,	2	0	0
College Fee,	0	10	0
SECOND SESSION.			
Mathematics (Second Course),	2	0	0
Experimental Physics,	2	0	0
Civil Engineering,	2	0	0
*Office Work,	2	0	0
College Fee,	0	5	0
THIRD SESSION.			
Natural Philosophy, applied,	2	0	0
Mathematical Physics,	2	0	0
Civil and Mechanical Engineering,	2	0	0
*Office Work,	2	0	0
College Fee.,	0	5	0

Non-Matriculated Student, shall have attended the prescribed Lectures, and passed the prescribed Examinations of the Professors of the Faculty of Law for two Collegiate years. and who shall have duly served as an apprentice or clerk by contract in writing, duly stamped at or before the signing thereof, or within six months after, for the term of four years, shall, at any time after the expiration of five years from the commencement of such attendance on Lectures or at such a period of service, whichever shall first happen, be qualified to be admitted as an Attorney or Solicitor as fully and effectually as any person having been bound, and having served five years is now qualified to be admitted. See also the same Act for the privileges extended to Graduates of the Queen's University, respecting admission to the profession of Attorney or Solicitor.

* For students who have attended this course in the first year the fee is only £1.

TABLE OF HOURS OF LECTURE.

Name of the Class.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Senior Greek,	9	9	10	–	9	–
Junior Greek,	10	–	9	9	10	–
Extra Greek,	–	10	–	10	–	–
Senior Latin,	10	–	9	–	10	–
Junior Latin,	9	10	10	10	–	–
Extra Latin,	–	11	–	11	–	–
English Language,	–	11	–	11	–	10
English Literature,	–	12	–	12	–	11
History,	1	–	1	–	1	–
Medical French,	12	–	12	–	12	–
Senior French (*Arts and Engineering*),	1	–	1	–	1	–
Junior French (*Arts and Engineering*),	2	–	2	–	2	–
German or Italian,	–	2	–	2	–	2
Celtic Languages,	12	–	12	–	12	–
Logic,	–	12	–	12	–	9
Metaphysics,	–	1	–	1	–	10
Political Economy and Jurisprudence,	–	11	11	11	11	–
Senior Mathematics,	2	–	2	–	2	–
Junior Mathematics,	12	–	12	–	12	–
Third Year's Mathematics,	3	–	3	–	3	–
Mathematical Physics,	–	–	12	–	12	–
Mathematical Physics (*Engineering*),	1	–	–	1	–	–
Experimental Physics, Senior,	11	–	11	–	11	–
Experimental Physics, Junior,	–	11	–	11	–	–
Engineering Physics,	–	1	–	–	1	–
Physics (Honor),	12	–	–	12	–	–
Chemistry,	11	–	11	–	11	–
Practical Chemistry,	2	–	2	–	2	–
Zoology and Botany,	3	–	3	–	3	–
Geology and Mineralogy,	–	2	–	2	–	10
Senior Engineering,	12	–	12	–	12	–
Junior Engineering,	–	10	–	10	–	10
Geometrical Drawing,	10	–	10	–	10	–
Office Work (10 till 2),	–	10	–	10	–	10
Anatomy and Physiology,	1	1	1	1	1	–
Practical Anatomy,	12	12	12	12	12	–
Medicine,	3	–	3	–	3	–
Surgery,	–	4	–	4	–	1
Materia Medica,	–	3	–	3	–	12
Midwifery,	4	–	4	–	4	–
Medical Jurisprudence,	–	12	–	12	1	–
English Law (1st year),	–	11	11	11	11	–
English Law (2nd year),	–	3	3	3	3	–
English Law (3rd year),	–	9	9	9	9	–
English Law (4th year),	–	12	12	12	12	–
Jurisprudence,	–	1	1	1	1	–
Civil Law,	–	4	4	4	4	–
Constitutional and International Law,	–	10	10	10	10	–

The Fees payable by Students, whether Matriculated or Non-matriculated, to the several Professors, for attendance on the several Pass Courses of Lectures or instruction, which are now or may be hereafter prescribed by the College Council, for any Degree or other University distinction, shall be £1 for each Course extending over one Term only, and £2 for each Course extending over more than one Term of a Session, when attended for the first time, and £1 for each re-attendance on the same; except that the Fee payable for the Course of Anatomy and Physiology shall be £3 when attended for the first time, and £2 for every subsequent attendance; except also, that the Fee payable for Practical Anatomy or Practical Chemistry, shall be £3 for each attendance.

In the case of Students receiving special instructions, not prescribed as a qualification for a Degree or other University distinction, or attending Honor Courses of Lectures, the Council shall have power to fix the amount of the Fee

AppendixA.

General Regulations of College, &c.

to be paid by each Student; provided that the Fee to be paid for any Honor Course of Lectures which Students are entitled to substitute for a prescribed Pass Course, shall in no case be less than £2.

PROGRAMME OF THE TIMES AND SUBJECTS OF THE SCHOLARSHIP EXAMINATIONS FOR THE SESSION 1868–69.

Examination Days.	From 9 to 12 o'clock.	From 2 to 5 o'clock.
Thursday, October 22nd,	Greek. Geometrical Drawing.	Greek.
Friday, October 23rd, .	Latin.	Mathematics.
Saturday, October 24th,	Modern Languages.	Pathology. Latin.
Monday, October 26th,	Materia Medica. Therapeutics. English Language (1st year).	Zoology and Botany. Practical Anatomy. History and English Lit. (senior).
Tuesday, October 27th,	English Literature (2nd and 3rd year).	Anatomy and Physiology.
Wednesday, Oct. 28th,	Surveying, &c. Surgery.	Practical Chemistry.
Thursday, October 29th,	Political Economy.	Midwifery.
Friday, October 30th, .	Logic. Metaphysics,	Chemistry.
Saturday, October 31st,	Natural Philosophy.	Geology and Mineralogy.
Thursday, Dec. 3rd., . .	English Law.	Civil Law.

APPENDIX.

Outlines of the Courses of Lectures delivered by the Professors of the Faculty of Arts.

LITERARY DIVISION OF THE FACULTY OF ARTS.

In Greek and Latin the classification of the Students is irrespective of their Collegiate standing; those of the First and Second years being distributed between two classes according to their proficiency. There is also in each of these Departments an Extra Class, the attendance on which is voluntary, and which consists generally of those Students who propose to become Candidates for Degree of A.M. or Classical Honors in the Queen's University, or for appointments in the Indian Civil Service.

Both the Extra and Ordinary Classes are open to Non-Matriculated Students, *i.e.* to gentlemen who have not yet commenced their Undergraduate course, or who do not intend to take *Degrees in Arts.*

THE GREEK LANGUAGE.

Professor, JOHN RYALL, LL.D.

Junior Class, Monday, Wednesday, Thursday, and Friday—Xenophon, Anab. Book VII.
Second Year, Monday, Wednesday, Thursday, and Friday—Sophocles, Œdipus Rex.
Third Year, Tuesday, Thursday—Æschylus, Eumenides.
Exercises in Prose and Verse, according to the proficiency of the Students.

THE LATIN LANGUAGE.

Professor, BUNNELL LEWIS, M.A., F.S.A.

Senior Class, Monday, Wednesday, and Friday:
Virgil—Eclogues.
Cicero—De Natura Deorum.
Junior Class, Monday, Tuesday, Wednesday, and Thursday:
Livy—Part of Book XXIII.
Horace—Satires, Book II., beginning at Satire 5.
Exercises in both Classes chiefly from Arnold's Introduction to Latin Composition.
Extra and Third Year's Class, Tuesday and Thursday:
Historics—Tacitus, Book III.
Terence—Heauton Timorumenos.

In this Class special attention is paid to original Composition, and to translation from English Authors into Latin.

HISTORY, ENGLISH LITERATURE, AND THE ENGLISH LANGUAGE.

Professor, WILLIAM RUSHTON, M.A.

1st and 2nd Term. {History—Monday, Wednesday, and Friday.
{English Literature—Tuesday, Thursday, and Saturday.
2nd Term—The English Language—Tuesday, Thursday, Saturday.

History:

1. European History from the decline of the Roman Empire to the present time.
2. History of Britain and Ireland.

English Literature:

The Course will include the History of English Literature, along with a Critical Examination of its Standard Works from the earliest period up to the present day.

The English Language:

1. The History of the English Language.
   First Year.—Text Book, Craik's Outlines.
   Third Year.—Text Books, Max Muller on the Science of Language.
   Marsh's Lectures.
2. Grammar and Composition.
   Text Books, Latham—English Language.
   Adams—Elements of the English Language.
   Angus—Handbook of the English Tongue.
   Campbell's Philosophy of Rhetoric.
   Whately's Rhetoric.

English Composition.
Essays on subjects discussed in the Lectures. Translations. Analysis. Original Essays.

MODERN LANGUAGES.

Professor, R. DE VERICOUR, M.A.

French Class (Medical), Mondays, Wednesdays, and Fridays, at 12 o'clock.
Senior French (Arts and Engineering), Mondays, Wednesdays, and Fridays, at 1 o'clock.
Junior French Class (Arts and Engineering), Mondays, Wednesdays, and Fridays, at 2 o'clock.
German or Italian, Tuesdays and Fridays, at 2 o'clock.
Medical French—Lectures sur les Sciences, par Achille Comte. Extracts from Bichat, Andral, Lallemand, and Chomel. Weekly Lectures on the Grammar and Idioms.
Senior and Junior French—Corneille's Cid and Cinna. Fables de Lafontaine. Racine's Athalie, and Esther. Histoire de la Revolution Française, par Mignet. La Misanthrope and L'Avare of Molière. Histoire de la Littérature Française, par Demogeot. Lectures sur les Sciences, par Achille Comte. Weekly Lectures on the Grammar and Idioms.
Italian—Silvio Pelico. Tasso. Extracts from Machiavelli, Guicciardini, Davila, Manzoni. Weekly Lectures.
German—Göethe's Ballads and Iphigenie. Schiller's Wilhelm Tell. National Literature, von A. F. Villmar. Weekly Lectures.

Appendix A.

General Regulation of College, &c.

SPECIAL COURSE NOT REQUIRED FOR A DEGREE.—CELTIC LANGUAGES.

Professor, OWEN CONNELLAN, Esq.

Monday, Wednesday, and Friday.

Subject—I. The Celtic Family of Languages; and its existing derivations, the Erse or Gaelic, Manx, Welch, Armorican, and Hiberno-Celtic. The Ogham Alphabet. The Ancient Literature of Ireland, viz.:—The earlier Bardic Compositions, the Ossianic Poems and Fenian Legends; View of the Contemporaneous state of Ireland.*

" II. The Irish Language as now extant, its Grammar, Vocabulary, and Dialects. In this part of the course, the Student will be taught to speak and write the language grammatically.

Fee for each Sessional Course, £2.

*The Lectures will be illustrated by reference to Irish MSS., and such publications on Irish Historical and general Literature as are at present accessible.

SCIENCE DIVISION OF THE FACULTY OF ARTS

MATHEMATICS.

Professor, CHARLES NIVEN, B.A.

Junior Class, Monday, Wednesday, and Friday.
Subjects—Arithmetic, Algebra, Geometry, and Plane Trigonometry.

Second Year's Class, Monday, Wednesday, and Friday.
Subjects—Analytical Geometry, Trigonometry, Differential and Integral Calculus.

Third Year's Class:
Subjects—Geometry of three dimensions, Differential Equations, &c.
Exercises are regularly set in each of the Classes.

LOGIC AND METAPHYSICS.

Professor, GEORGE SIDNEY READ, M.A.

2nd Term,	Logic,	Tuesday, Thursday, and Saturday.
1st & 2nd Terms,	Metaphysics,	Do. do. do.

Logic.—This Course consists of:—

I.—Lectures, Examinations, and Exercises in Aldrich's Compendium of Logic, occupying the early part of the Term, &c.

II.—A full discussion of Classification, the Theory of Hypothetical Syllogisms and of Induction, and the Analytic of Logical Forms, as contained in the works of Mill, Whately, Thompson, and Baynes.

Throughout the Course the Students will be expected to familiarize themselves with the reduction of arguments to their strict Logical Form by written exercises, which will be examined by the Professor.

Metaphysics.—This Course will embrace:—

I.—The Philosophy of the Inductive Sciences, illustrated by reference to Lord Bacon, Whewell, and Mill; and—

II.—The History of Mental Philosophy, comprising—

1st.—The origin, progress, and development of Modern Philosophy anterior to the rise of the Scottish School.

2nd.—A critical examination of the works of the more celebrated writers of that School.

3rd.—A brief view of the present state of Philosophy in the British Islands and on the Continent.

POLITICAL ECONOMY.

Professor, RICHARD HORNER MILLS, M.A.

Political Economy.—The nature and distribution of wealth, the principles which regulate Rents, Profits, and Wages; the Principles of Commerce, of Taxation, of the Funding System, and of Currency and Banking.

Books recommended:—

Adam Smith—Wealth of Nations.
Senior—Political Economy.
Fawcett's Manual of Political Economy.
John Stuart Mill—Political Economy.

Appendix A.

General Regulations of College, &c.

Richard H. Mills—Lectures on Currency and Banking (Second Edition).
M'Culloch—Taxation and Funding (Third Edition).
Goschen on Foreign Exchanges.

The Course consists of Twenty-four Lectures, delivered in the months of December, February, and March; the Students are required in the intervals to prepare the subjects which will be pointed out by the Professor.

Chemistry.

Professor, John Blyth, M.D.

Monday, Wednesday, and Friday.

The Course is divided into Inorganic and Organic Chemistry.

In the first part are discussed the Laws of Combination and Affinity, Molecular Chemistry and Crystallography, and the History of the Non-Metallic and Metallic substances.

In the Organic portion of the Course will be considered the subjects of Organic Analysis, Organic Series, Compound Radicals and Types, Metamorphosis of Organic Bodies, History of special Animal and Vegetable Bodies.

In treating of the Laws of Chemistry, and the History of Inorganic and Organic Bodies, those points will be chiefly dwelt upon which have a practical bearing in the Arts, Medicine, Engineering, and Agriculture. Thence, during the Course, attention will be directed to the application of Chemistry to Medicine and Physiology, to Metallurgic Operations, Chemical Manufactures, Building Materials, Soils, Manures.

Fee, for each Sessional Course, £2. Each subsequent Course in Medicine, £1.

Analytical Chemistry:

The Chemical Laboratory is open daily, except on Saturdays, from 10 to 4 o'clock, under the superintendence of the Professor, for students desirous of prosecuting an extended course of qualitative and quantitative analysis, and for the purpose of original investigation in connexion with the arts, or in the higher departments of Scientific Chemistry.

Natural Philosophy.

Professor, John England, M.A.

Experimental Physics (Senior):

Text Books—Galbraith and Haughton's Manuals of Mechanics, Hydrostatics, &c.; Jamin; Traite de Physique.

Experimental Physics (Junior):

Text Books—Ganot, Traite de Physique.

Mathematical Physics:

Text Books—Duhamel's *Mecanique*. Parkinson's *Optics*. Brinkley's *Astronomy*.

Engineering Physics:

Text Books—Tate's *Exercises in Mechanics*, selections from the works of Mosely, De Pambour, Weisbach, Twisden's Practical Mechanics, &c.

Natural History.

Professor, Joseph Reay Greene, B.A. M.D.

Monday, Wednesday, and Friday.

The Lectures delivered by the Professor of Natural History are as follow:—

A Course of Lectures on General Zoology.
A Course of Lectures on Botany.

Students may obtain Certificates of Attendance on all or any of these Courses.

Text Books recommended:

In Botany—"Elementary Course of Botany," by Henfrey.
In Zoology—"Zoologie" (In Cours Elémentaire d'Histoire Naturelle), par Milne Edwards; or the English translation of the same work by Dr. Knox.

Such Students as desire during the Summer months to pursue the study of Botany in the field, are requested to provide themselves with Lindley's "Descriptive Botany," and Bentham's "Handbook of the British Flora."

GEOLOGY AND MINERALOGY.

Professor, ROBERT HARKNESS, F.R.S.S.L. & E., F.G.S.

Monday, Wednesday, and Friday.

General Structure of the Earth; the causes at present in operation which modify its surface; Nature of Rocks which enter into composition with the crust of the Globe; description and classification of Sedimentary Deposits; Organic Remains; Physical Geography of the Earth during the several geological epochs; characters and nature of Igneous, Plutonic, and Metamorphic Rocks; Mineral Veins—their contents and mode of occurrence; application of Geology to Engineering, Mining, Agriculture and Land Improvement.

Forms, Structure, Physical and Chemical characters of Minerals; descriptions of the most important simple minerals—circumstances and conditions under which they are found.

CIVIL ENGINEERING.

Professor, ALEXANDER JACK, M.A.

FIRST YEAR.—Monday, Wednesday, and Friday.

Subject of Lectures—Orthographic Projection; Descriptive Geometry; Shadows; Isometric Projection; Perspective; Geometry of the Oblique Bridge; Principles of Architecture.

Text Books—Hall's Descriptive Geometry; Engineer and Machinist's Drawing Book; Rickman's Architecture; Buck on Oblique Bridges.

SECOND YEAR.—Tuesday, Thursday, and Saturday.

Subject of Lectures—Surveying and Levelling.

Text Books—Rankine's Civil Engineering; Cotton's Manual of Railway Engineering; Williams' Geodesy.

THIRD YEAR.—Monday, Wednesday, and Friday.

Materials used in Construction; Principles of Construction of Bridges, Roads, Railways, Canals; Hydraulic Engineering; Strength of Materials; Principles of the Construction of the different Machines employed by the Engineer.

DRAWING OFFICE—Attended by all the Classes—Tuesday, Thursday, and Saturday.

The First Year's Class are chiefly employed in drawing the problems given at lectures, and a few easy examples of their applications. The Second and Third Years' Classes, in making working drawings of examples of the subjects of lectures, and in Mapping.

Practical Instruction in the Field in the use of Surveying Instruments will be given during the Session.

SPECIAL PROSPECTUS of COURSES of INSTRUCTION given in the COLLEGES which are applicable to the EXAMINATION for the INDIAN CIVIL SERVICE.

Special Prospectus of Courses for Competitive Examinations.

Subjects of Examination for the Indian Civil Service.	*Lectures on these Subjects in Queen's College, Cork.*
1. ENGLISH LANGUAGE and LITERATURE:	HISTORY and ENGLISH LANGUAGE—*Professor*, William Rushton, M.A.
a. Composition, Marks, 500	*First Term.*—Modern History: Monday, Wednesday, and Friday.
b. English Literature and History, including that of the Laws and Constitution, Marks, 1,000	*Second Term.*—English Literature: Tuesday, Thursday, and Saturday. History of the English Language: Tuesday, Thursday, Saturday.
1,500	English Composition will, at the stated periods, be required from the students.

Appendix A.

Special Prospectus of Courses for Competitive Examinations.

2. LANGUAGE, LITERATURE, and HISTORY of GREECE: Marks, 750	GREEK—*Professor*, John Ryall, LL.D. Senior Class: Monday, Friday, Wednesday. Junior Class: Monday, Friday, Wednesday, Thursday. Extra Class: Tuesday, Thursday.
3. LANGUAGE, LITERATURE, and HISTORY of ROME: Marks, 750	LATIN—*Professor*, Bunnell Lewis, M.A. F.S.A. Senior Class: Monday, Wednesday, Friday. Junior Class: Monday, Tuesday, Wednesday, Thursday. Extra Class: Tuesday and Thursday. The Extra Class, both in Latin and Greek, the attendance on which is voluntary, consists generally of those students who propose to become Candidates for the Degree of M.A., or Classical Honors, in the Queen's University, or for appointments in the Indian Civil Service.
4, LANGUAGE, LITERATURE, and HISTORY of FRANCE: Marks, 375	FRENCH—*Professor*, R. De Vericour, M.A. Senior Class: Monday, Wednesday, Friday. Junior Class: Monday, Wednesday, Friday.
5. LANGUAGE, LITERATURE, and HISTORY of GERMANY: Marks, 375	GERMAN. Tuesday, Thursday.
6. LANGUAGE, LITERATURE, and HISTORY of ITALY: Marks, 375	ITALIAN. Monday, Wednesday, and Friday.
7. MATHEMATICS, Pure and Mixed: Marks, 1,250	MATHEMATICS—*Professor*, Charles Niven, B.A. Junior Class: Monday, Wednesday, Friday. Senior Class: Monday, Wednesday, Friday. MATHEMATICAL PHYSICS—*Professor*, John England, M.A. Tuesday, Thursday, and Saturday.
8. NATURAL SCIENCES: that is, Chemistry, Electricity, and Magnetism, Natural History, Geology, and Mineralogy: Marks, 500 *** No Candidate will be allowed to be examined in more than three of the branches of knowledge included under this head, and the total (500 marks) may be obtained by adequate proficiency in any three.	CHEMISTRY—*Professor* Blyth, M.D. Monday, Wednesday, and Friday. EXPERIMENTAL PHYSICS (Electricity and Magnetism)—*Professor*, John England, M.A. Monday, Wednesday, and Friday. NATURAL HISTORY—*Professor*, J. R. Greene, B.A., M.D. Monday, Wednesday, and Friday. GEOLOGY and MINERALOGY—*Professor*, Robert Harkness, F.R.SS.L. & E., F.G.S. Monday, Wednesday, and Friday.

9. MORAL SCIENCES: that is, Logic, Mental and Moral Philosophy: Marks, 500	LOGIC and METAPHYSICS—*Professor*, G. S. Read, M.A. Logic: Tuesday, Thursday, Saturday. Metaphysics: Tuesday, Thursday, Saturday.
	JURISPRUDENCE and POLITICAL ECONOMY—*Professor*, Richard Horner Mills, M.A.

Appendix A.

Special Prospectus of Courses for Competitive Examinations.

COURSES of INSTRUCTION given in the COLLEGE which are applicable to the COMPETITIVE EXAMINATION for ADMISSION to the ROYAL MILITARY ACADEMY at WOOLWICH.

Subjects of Examination for the direct appointments to the Practical Class at Woolwich.	*Lectures on these Subjects in Queen's College, Cork.*
MATHEMATICS (Pure): Marks, 2,500	*Professor*, Charles Niven, B.A. Junior Class: Monday, Wednesday, Friday. Senior Class: Monday, Wednesday, Friday.
MATHEMATICS (Mixed):— Statics, Dynamics, Hydrostatics: Marks, 1,000	*Professor*, John England, M.A. Tuesday, Thursday, and Saturday.
LANGUAGE of ANCIENT ROME: Marks, 1,500	*Professor*, Bunnell Lewis, M.A., F.S.A. Junior Class: Monday, Tuesday, Wednesday, Thursday.
LANGUAGE of ANCIENT GREECE: Marks, 1,500	*Professor*, John Ryall, LL.D. Junior Class: Monday and Friday, Wednesday and Thursday.
LANGUAGE of FRANCE: Marks, 1,000	*Professor*, Raymond de Vericour, M.A. Monday, Wednesday, and Friday.
And GERMANY: Marks, 1,000	
ENGLISH LANGUAGE, LITERATURE, COMPOSITION, HISTORY and GEOGRAPHY (Modern): Marks, 3,000	*Professor*, William Rushton, M.A. Tuesday, Thursday, and Saturday.
EXPERIMENTAL SCIENCES:— Chemistry: Marks, 1,000	*Professor*, John Blyth, M.D. Monday, Wednesday, and Friday.
HEAT, ELECTRICITY, including MAGNETISM:	*Professor*, John England, M.A. Monday, Wednesday, and Friday.
NATURAL SCIENCES:— Mineralogy and Geology: Marks, 1,000	*Professor*, Robt. Harkness, F.R.SS.L. & E., F.G.S.
DRAWING, *i.e.*, Elementary Geometrical Drawing, including the use of Drawing Instruments: Marks, 500	*Professor*, Alexander Jack, M.A. Monday, Wednesday, and Friday.
Machinery, Architectural, Topographical, Landscape, or Figure Drawing: Marks, 500	Monday, Wednesday, and Friday.

Appendix A.

Special Prospectus of Courses for Competitive Examinations

Competitive Examinations for admission are held in London twice a year, in January and July. They are conducted by Examiners appointed for the purpose. in the presence and under the superintendence of the Council of Military Education.

The Candidates must be between 16 and 19 years of age.

The admissions will be determined by the result of the examination, the subjects of which will be as follows, viz.:—

				Marks.
1. Mathematics,	Pure,	Section I. Arithmetic, Algebra, Euclid, Plane Trigonometry,	2,000	3,500
		Section II. Spherical Trigonometry, elements of Co-ordinate Geometry, and of the Differential and Integral Calculus,*	500	
	Mixed:—	Statics, Dynamics, and Hydrostatics,	1,000	

* *Syllabus of Examination in the Differential and Integral Calculus.*

DIFFERENTIAL CALCULUS.

The meaning of Differentiation.

The Differentiation of Elementary Functions of one independent variable.

The theorems of Taylor and Maclaurin, with their applications.

The theory of Maxima and Minima, with its applications.

The equations to the Tangents, Normals, and Asymptotes of Plane Curves.

The curvature of Plane Curves and their radii of curvature and evolutes.

The Differential Coefficients of the Arcs and Areas of Plane Curves to rectangular and polar Co-ordinates, and of the surfaces and volumes of solids of revolution.

INTEGRAL CALCULUS.

The meaning of Integration.

The Integration of Elementary Functions.

The Integration of Rational Fractions.

The determination of the lengths and areas of Plane Curves, and of the surfaces and volumes of solids of revolution.

		Marks.
2. English Language and Composition,		1,000
3. History of England, its Dependencies and Colonies,		1,000
4. Geography (Modern),		1,000
5. Classics,	Latin Language,	1,500
	Greek ditto,	1,500
6. French Language,		1,000
7. German ditto,		1,000
8. Hindustani ditto,		1,000

The examination in French, German, and Hindustani, will include writing from dictation.

		Marks.
9. Experimental Sciences, *i.e.*, Chemistry, Heat, Electricity, including Magnetism,		1,000
10. Natural Sciences, *i.e.*, Mineralogy and Geology,		1,000
11. Drawing,	Elementary Geometrical Drawing, including the use of Drawing Instruments,	500
	Free-hand Drawing of Machinery, Architectural, Topographical, Landscape, or Figure Subjects,	500

No Candidate will be allowed to be examined in more than five subjects, of which one must be Mathematics; and no one who does not obtain at least 700 marks in Section I. of Pure Mathematics will be eligible for an appointment.

RESIDENCES.

There is no accommodation for the residence of students within the College, but it is provided by the Statutes that every Matriculated Student, being under the age of Twenty-one Years, shall reside, during the College Terms, with his parent or guardian, or with some relation or friend, to whose care he shall have been committed by his parent or guardian, or in one of the Boarding-houses licensed by the President of the College and arranged for the reception of students, who are then placed under the moral care and spiritual charge of the Deans of Residence of their respective creeds.

The Terms for Board and Lodging are generally at the rate of from £30 to £40 a-year.

DEANS OF RESIDENCES.

Appendix A.

Deans of Residences.

Church of England,	Rev. George Webster, D.D.
Presbyterian Church,	Rev. William Magill.
Wesleyan Communion,	Rev. Edward Best.
Non-Subscribing Presbyterian,	Rev. W. Whitelegge, M.A.

N.B.—Letters from persons desiring further information, to be addressed to the Registrar.

Signed,

By order of the President,

ROBERT JOHN KENNY, *Registrar.*

APPENDIX B.

Appendix B.

Examination Papers for Scholarships.

SELECTION OF PAPERS OF QUESTIONS USED AT THE SCHOLARSHIP EXAMINATIONS.

GREEK.—FIRST YEAR SCHOLARSHIPS.

Translate:—

HERODOTUS, Book ii., c. 91.

Ἑλληνικοῖσι δὲ νομαίοισι φεύγουσι χρᾶσθαι, τὸ δὲ σύμπαν εἰπεῖν, μηδ' ἄλλων μηδαμὰ μηδαμῶν ἀνθρώπων νομαίοισι. οἱ μέν νυν ἄλλοι Αἰγύπτιοι οὕτω τοῦτο φυλάσσουσι, ἔστι δὲ Χέμμις πόλις μεγάλη νομοῦ τοῦ Θηβαϊκοῦ ἐγγὺς Νέης πόλιος. ἐν ταύτῃ τῇ πόλι ἐστὶ Περσέος τοῦ Δανάης ἱρὸν τετράγωνον, πέριξ δὲ αὐτοῦ φοίνικες πεφύκασι. τὰ δὲ πρόπυλα τοῦ ἱροῦ λίθινά ἐστι, κάρτα μεγάλα· ἐπὶ δὲ αὐτοῖσι ἀνδριάντες δύο ἑστᾶσι λίθινοι μεγάλοι. ἐν δὲ τῷ περιβεβλημένῳ τούτῳ νηός τε ἔνι καὶ ἄγαλμα ἐν αὐτῷ ἐνέστηκε τοῦ Περσέος. οὗτοι οἱ Χεμμῖται λέγουσι τὸν Περσέα πολλάκις μὲν ἀνὰ τὴν γῆν φαίνεσθαί σφι, πολλάκις δὲ ἔσω τοῦ ἱροῦ, σανδάλιόν τε αὐτοῦ πεφορημένον εὑρίσκεσθαι, ἐὸν τὸ μέγαθος δίπηχυ, τὸ ἐπεὰν φανῇ, εὐθηνέειν ἅπασαν Αἴγυπτον. ταῦτα μὲν λέγουσι, ποιεῦσι δὲ τάδε Ἑλληνικὰ τῷ Περσέϊ· ἀγῶνα γυμνικὸν τιθεῖσι διὰ πάσης ἀγωνίης ἔχοντα, παρέχοντες ἄεθλα κτήνεα καὶ χλαίνας καὶ δέρματα. εἰρομένου δέ μευ, ὅ τι σφι μούνοισι ἔωθε ὁ Περσεὺς ἐπιφαίνεσθαι καὶ ὅ τι κεχωρίδαται Αἰγυπτίων τῶν ἄλλων ἀγῶνα γυμνικὸν τιθέντες, ἔφασαν τὸν Περσέα ἐκ τῆς ἑωυτῶν πόλιος γεγονέναι· τὸν γὰρ Δαναὸν καὶ τὸν Λυγκέα ἐόντας Χεμμίτας ἐκπλῶσαι ἐς τὴν Ἑλλάδα ἀπὸ δὲ τούτων γενεηλογέοντες κατέβαινον ἐς τὸν Περσέα. ἀπικόμενον δὲ αὐτὸν ἐς Αἴγυπτον κατ' αἰτίην, τὴν καὶ Ἕλληνες λέγουσι οἴσοντα ἐκ Λιβύης τὴν Γοργοῦς κεφαλήν, ἔφασαν ἐλθεῖν καὶ παρὰ σφέας καὶ ἀναγνῶναι τοὺς συγγενέας πάντας· ἐκμεμαθηκότα δέ μιν ἀπικέσθαι ἐς Αἴγυπτον τὸ τῆς Χέμμιος οὔνομα, πεπυσμένον παρὰ τῆς μητρός· ἀγῶνα δέ οἱ γυμνικὸν αὐτοῦ κελεύσαντος ἐπιτελέειν.

Write down in the Attic dialect that portion of the extract beginning *τὰ δὲ πρόπυλα τοῦ ἱροῦ κ.τ.λ.*, and ending *ποιεῦσι δὲ τάδε Ἑλληνικὰ τῷ Περσέϊ.*

Translate into Greek:—

1. I know that I am mortal. I know that he is mortal.
2. The upper city. The intervening space. The present king.
3. While you were playing, I was writing.
4. When the allies were approaching, the Athenians had conquered the Persians.
5. If you were to say this, you would err. If you say this, you will err.
6. You must desire virtue. You must attempt the work. You must punish the man.
7. Cyrus, leaping down from his chariot, put on his breastplate, and, mounting his horse, took his javelins in his hands.

Translate:—

(A).—Homer—*Iliad*, Book v., vv. 554–575.

οἵω τώ γε λέοντε δύω ὄρεος κορυφῇσιν
ἐτραφέτην ὑπὸ μητρὶ βαθείης τάρφεσιν ὕλης·
τὼ μὲν ἄρ' ἁρπάζοντε βόας καὶ ἴφια μῆλα
σταθμοὺς ἀνθρώπων κεραΐζετον, ὄφρα καὶ αὐτὼ
ἀνδρῶν ἐν παλάμῃσι κατέκταθεν ὀξέϊ χαλκῷ·
τοίω τὼ χείρεσσιν ὑπ' Αἰνείαο δαμέντε
καππεσέτην, ἐλάτῃσιν ἐοικότες ὑψηλῇσιν.
τὼ δὲ πεσόντ' ἐλέησεν Ἀρηΐφιλος Μενέλαος,
βῆ δὲ διὰ προμάχων κεκορυθμένος αἴθοπι χαλκῷ,
σείων ἐγχείην· τοῦ δ' ὤτρυνεν μένος Ἄρης,
τὰ φρονέων, ἵνα χερσὶν ὑπ' Αἰνείαο δαμείη.
τὸν δ' ἴδεν Ἀντίλοχος, μεγαθύμου Νέστορος υἱὸς,
βῆ δὲ διὰ προμάχων· περὶ γὰρ δίε ποιμένι λαῶν,
μή τι πάθοι, μέγα δέ σφας ἀποσφήλειε πόνοιο.
τὼ μὲν δὴ χεῖράς τε καὶ ἔγχεα ὀξυόεντα
ἀντίον ἀλλήλων ἐχέτην μεμαῶτε μάχεσθαι·
Ἀντίλοχος δὲ μάλ' ἄγχι παρίστατο ποιμένι λαῶν.
Αἰνείας δ' οὐ μεῖνε, θοός περ ἐὼν πολεμιστὴς,
ὡς εἶδεν δύο φῶτε παρ' ἀλλήλοισι μένοντε.
οἱ δ' ἐπεὶ οὖν νεκροὺς ἔρυσαν μετὰ λαὸν Ἀχαιῶν,
τὼ μὲν ἄρα δειλὼ βαλέτην ἐν χερσὶν ἑταίρων,
αὐτὼ δὲ στρεφθέντε μετὰ πρώτοισι μαχέσθην.

1. (*a*). State the mood, tense, number, and person of each of the following verbs, giving also their Attic equivalents:—ἐτραφέτην, κεραΐζετον, ἐλέησε, δαμείη, ἴδεν, βῆ, δίε, ἀποσφήλειε, ἐχέτην, παρίστατο, μεῖνε, εἶδε, ἔρυσαν, βαλέτην, μαχέσθην.—Write down the present infinitive of each. (*b*). Decline, both according to the Homeric and the Attic forms, δύω, χείρεσσιν, Αἰνείαο. (*c*). Explain the grammatical forms, ἐοικότες, κεκορυθμένος, μεμαῶτε. (*d*). What part of speech is περί, v. 566? Distinguish between περί and πέρι. (*e*). Notice any peculiarity in the scansion of v. 563.

Translate:—

(B).—Euripides—*Medea*, vv. 1028–1050.

ὦ δυστάλαινα τῆς ἐμῆς αὐθαδίας.
ἄλλως ἄρ' ὑμᾶς, ὦ τέκν', ἐξεθρεψάμην,
ἄλλως δ' ἐμόχθουν καὶ κατεξάνθην πόνοις,
στερρὰς ἐνεγκοῦσ' ἐν τόκοις ἀλγηδόνας.
ἦ μήν ποθ' ἡ δύστηνος εἶχον ἐλπίδας
πολλὰς ἐν ὑμῖν γηροβοσκήσειν τ' ἐμὲ
καὶ κατθανοῦσαν χερσὶν εὖ περιστελεῖν,
ζηλωτὸν ἀνθρώποισι· νῦν δ' ὄλωλε δὴ
γλυκεῖα φροντίς. σφῷν γὰρ ἐστερημένη
λυπρὸν διάξω βίοτον ἀλγεινόν τ' ἐμοί.
ὑμεῖς δὲ μητέρ' οὐκέτ' ὄμμασιν φίλοις
ὄψεσθ', ἐς ἄλλο σχῆμ' ἀποστάντες βίου.
φεῦ φεῦ· τί προσδέρκεσθέ μ' ὄμμασιν, τέκνα;
τί προσγελᾶτε τὸν πανύστατον γέλων;
αἰαῖ· τί δράσω; καρδία γὰρ οἴχεται,
γυναῖκες, ὄμμα φαιδρὸν ὡς εἶδον τέκνων.
οὐκ ἂν δυναίμην· χαιρέτω βουλεύματα
τὰ πρόσθεν· ἄξω παῖδας ἐκ γαίας ἐμούς.
τί δεῖ με πατέρα τῶνδε τοῖς τούτων κακοῖς
λυποῦσαν αὐτὴν δὶς τόσα κτᾶσθαι κακά;
οὐ δῆτ' ἔγωγε. χαιρέτω βουλεύματα.
καίτοι τί πάσχω; βούλομαι γέλωτ' ὀφλεῖν
ἐχθροὺς μεθεῖσα τοὺς ἐμοὺς ἀζημίους;

Appendix B. — Examination Papers for Scholarships.

1. (*a*). What is the construction of the gen. *αὐθαδίας*, v. 1028. (*b*). How do you derive the meaning of *ἄλλως* in the text from its primitive meaning? In what other sense is it sometimes used? (*c*). Supply the subject of *γηροβοσκήσειν*, and explain the construction of *ζηλωτόν*, vv. 1033–5. (*d*). Explain the formation and use of verbal adjectives in *τος* and *τεος*. (*e*). What is the construction of *γέλων*, v. 1041? (*f*). Derive or decompound *αὐθαδία*, *κατεξάνθην*, *δύστηνος*, *πανύστατον*. (*g*). Translate *literally* *χαιρέτω βουλεύματα* and *γέλωτα ὀφλεῖν*.—Which accentuation do you approve, *ὀφλεῖν* or *ὄφλειν*, and why?

2. (*a*). Point out the rhythmical faults in the following verses:—

Ἄτλας ὁ χαλκέοισι νώτοις οὐρανόν.
τίνας λόγους ἐροῦσιν, ἐν γὰρ τῷ μαθεῖν.

(*b*). Are the following rhythms admissible?—

πεισόμεθ' ὅταν δὲ μὴ καλῶς οὐ πείσομαι.
ἀλλ' ὡς τάχιστα παῖδες ὑμεῖς μὲν βάθρων.

3. State the distinctions between epic, dramatic, lyric, and didactic poetry; and give the names and eras of the principal Grecian authors in each kind.

SECOND YEAR SCHOLARSHIPS.

Translate:—

(A).—HOMER—*Odyssey*, Book xiv., vv. 72–92.

ὣς εἰπὼν ζωστῆρι θοῶς συνέεργε χιτῶνα,
βῆ δ' ἴμεν ἐς συφεοὺς, ὅθι ἔθνεα ἔρχατο χοίρων.
ἔνθεν ἑλὼν δύ' ἔνεικε καὶ ἀμφοτέρους ἱέρευσεν,
ευσέ τε μίστυλλέν τε καὶ ἀμφ' ὀβελοῖσιν ἔπειρεν.
ὀπτήσας δ' ἄρα πάντα φέρων παρέθηκ' Ὀδυσῆϊ
θέρμ' αὐτοῖς ὀβελοῖσιν· ὁ δ' ἄλφιτα λευκὰ πάλυνεν·
ἐν δ' ἄρα κισσυβίῳ κίρνη μελιηδέα οἶνον,
αὐτὸς δ' ἀντίον ἷζεν, ἐποτρύνων δὲ προσηύδα.
"ἔσθιε νῦν, ὦ ξεῖνε, τάτε δμώεσσι πάρεστιν,
χοίρε'· ἀτὰρ σιάλους γε σύας μνηστῆρες ἔδουσιν,
οὐκ ὄπιδα φρονέοντες ἐνὶ φρεσὶν οὐδ' ἐλεητύν.
οὐ μὲν σχέτλια ἔργα θεοὶ μάκαρες φιλέουσιν,
ἀλλὰ δίκην τίουσι καὶ αἴσιμα ἔργ' ἀνθρώπων.
καὶ μὲν δυσμενέες καὶ ἀνάρσιοι, οἵτ' ἐπὶ γαίης
ἀλλοτρίης βῶσιν καί σφι Ζεὺς ληΐδα δώῃ,
πλησάμενοι δέ τε νῆας ἔβαν οἶκόνδε νέεσθαι,
καὶ μὲν τοῖς ὄπιδος κρατερὸν δέος ἐν φρεσὶ πίπτει.
οἶδε δὲ καί τι ἴσασι, θεοῦ δέ τιν' ἔκλυον αὐδὴν,
κείνου λυγρὸν ὄλεθρον, ὅτ' οὐκ ἐθέλουσι δικαίως
μνᾶσθαι οὐδὲ νέεσθαι ἐπὶ σφέτερ', ἀλλὰ ἕκηλοι
κτήματα δαρδάπτουσιν ὑπέρβιον, οὐδ' ἔπι φειδώ."

1. (*a*). *ἔρχατο*.—Explain fully the origin of this form, stating the verb from which it comes. Show that it was a digammated word. (*b*). Derive *συφεός*, *κισσύβιον*, *παλύνω*, *ἀνάρσιος*, *ὄπις*. (*c*). Explain the following grammatical forms:—*ἔνεικε*, *κίρνη*, *βῶσιν*, *δώῃ*, *ἔπι*. (*d*). Distinguish between *χοῖρος* and *σίαλος*, *δώῃ* and *δῴη*. (*e*). Is *ὅτ'* (v. 90) for *ὅτι* or *ὅτε*? State the reason for your opinion. (*f*). Supply the final letter of *χοίρε'* (v. 81). What part of speech is the word? Give its Attic form.

2. Point out the *anacoluthon* in the sentence beginning *καὶ μὲν δυσμενέες κ.τ.λ.* and correct its syntax.

Translate:—

(B).—ÆSCHYLUS—*Prometheus Vinctus*, vv. 887–905.

ΧΟ. *ἦ σοφὸς ἦ σοφὸς ὃς* *στρ.*
πρῶτος ἐν γνώμᾳ τόδ' ἐβάστασε καὶ γλώσσᾳ διεμυθολόγησεν,
ὡς τὸ κηδεῦσαι καθ' ἑαυτὸν ἀριστεύει μακρῷ.
καὶ μήτε τῶν πλούτῳ διαθρυπτομένων

Appendix B.

Examination Papers for Scholarships.

μήτε τῶν γέννᾳ μεγαλυνομένων
ὄντα χερνήταν ἐραστεῦσαι γάμων.
μήποτε μήποτέ μ' ὦ ἀντ.
* * * Μοῖραι λεχέων Διὸς εὐνάτειραν ἴδοισθε πέλουσαν· 895
μηδὲ πλαθείην γαμέτᾳ τινὶ τῶν ἐξ οὐράνου.
ταρβῶ γὰρ ἀστεργάνορα παρθενίαν
εἰσορῶσ' Ἰοῦς μέγα δαπτομέναν
δυσπλάνοις Ἥρας ἀλατείαις πόνων. 900
ἐμοὶ δ' ὅτι μὲν ὁμαλὸς ὁ γάμος
ἄφοβος, οὐ δέδια, μηδὲ κρεισσόνων θεῶν
ἔρως ἄφυκτον ὄμμα προσδράκοι με.
ἀπόλεμος ὅδε γ' ὁ πόλεμος, ἄπορα
πόριμος· οὐδ' ἔχω τίς ἂν γενοίμαν. 905

1. (*a*). Give the primitive meanings of *βαστάζειν* and *διαθρύπτειν*, and thence derive those which they bear in the text. (*b*). Give the feminine forms of χερνήτης and *γαμέτης*, and the masc. of *εὐνάτειρα*. (*c*). Derive or decompound χερνήτης, *ἀστεργάνωρ, ὁμαλός, δύσπλανος*. (*d*). From what verb does *πλαθείην* come, and what other form of the word is found? (*e*). What grammatical figure is exemplified in the words *ἀλατείαις πόνων*? (*f*). Explain the construction of *ὄμμα*, v. 903, and of *ἄπορα*, v. 904.

2. *ἐμοὶ δ' ὅτι κ.τ.λ.* vv. 902-4. Translate with Hermann's reading:—*ἐμοὶ δὲ γ' ὅτε μὲν ὁμαλὸς ὁ γάμος, ἄφοβος, οὐδὲ δέδια μηδὲ τού με κρεισσόνων θεῶν ἔρως προσδράκοι ὄμμ' ἄφυκτον.*

3. Translate into trimeter iambic verse:—

Alas! good vent'rous youth,
I love thy courage yet, and bold emprize;
But here thy sword can do thee little stead;
For other arms and other weapons must
Be those that quell the might of hellish charms.

Translate:—

(A).—HERODOTUS, Book vii., c. 133.

ἐς δὲ Ἀθήνας καὶ Σπάρτην οὐκ ἀπέπεμψε Ξέρξης ἐπὶ γῆς αἴτησιν κήρυκας τῶνδε εἵνεκεν· πρότερον Δαρείου πέμψαντος ἐπ' αὐτὸ τοῦτο οἱ μὲν αὐτῶν τοὺς αἰτέοντας ἐς τὸ βάραθρον, οἱ δ' ἐς φρέαρ ἐσβαλόντες ἐκέλευον γῆν τε καὶ ὕδωρ ἐκ τούτων φέρειν παρὰ βασιλέα. τούτων μὲν εἵνεκεν οὐκ ἔπεμψε Ξέρξης τοὺς αἰτήσοντας. ὅ τι δὲ τοῖσι Ἀθηναίοισι ταῦτα ποιήσασι τοὺς κήρυκας συνήνεικε ἀνεθέλητον γενέσθαι, οὐκ ἔχω εἶπαι, πλὴν ὅτι σφέων ἡ χώρη καὶ ἡ πόλις ἐδηϊώθη. ἀλλὰ τοῦτο οὐ διὰ ταύτην τὴν αἰτίην δοκέω γενέσθαι.

Atticise, in dialect and style, the following passage:—

Ξέρξης δὲ ἐκ τῆς Ἀκάνθου ἐντειλάμενος τοῖσι στρατηγοῖσι τὸν ναυτικὸν στρατὸν ὑπομένειν ἐν Θέρμῃ ἀπῆκε ἀπ' ἑωυτοῦ τὰς νέας πορεύεσθαι, Θέρμῃ δὲ τῇ ἐν τῷ Θερμαίῳ κόλπῳ οἰκημένῃ, ἀπ' ἧς καὶ ὁ κόλπος οὗτος τήν ἐπωνυμίην ἔχει· ταύτῃ γὰρ ἐπυνθάνετο συντομώτατον εἶναι· μέχρι μὲν γὰρ Ἀκάνθου ὧδε τεταγμένος ὁ στρατὸς ἐκ Δορίσκου τὴν ὁδὸν ἐποιέετο· τρεῖς μοίρας ὁ Ξέρξης δασάμενος πάντα τὸν πεζὸν [στρατὸν] μίαν αὐτέων ἔταξε παρὰ θάλασσαν ἰέναι ὁμοῦ τῷ ναυτικῷ.—c. 121.

(B).—PLATO—*Apology of Socrates.*

ὡς ὤνησας, ὅτι μόγις ἀπεκρίνω ὑπὸ τουτωνὶ ἀναγκαζόμενος· οὐκοῦν δαιμόνια μὲν φὴς με καὶ νομίζειν καὶ διδάσκειν, εἴτ' οὖν καινὰ εἴτε παλαιά. ἀλλ' οὖν δαιμόνιά γε νομίζω κατὰ τὸν σὸν λόγον, καὶ ταῦτα καὶ διωμόσω ἐν τῇ ἀντιγραφῇ. εἰ δὲ δαιμόνια νομίζω καὶ δαίμονας δήπου πολλὴ ἀνάγκη *νομίζειν μέ ἐστιν· οὐχ οὕτως ἔχει ; ἔχει δή· τίθημι γάρ σε ὁμολογοῦντα, ἐπειδὴ οὐκ ἀποκρίνει.*

Appendix.

Examination Papers for Scholarships.

Transcribe the following passage, with stops and accents, and translate it :—

ισως γαρ ουν αν τις ειποι σιγων δε και ησυχιαν αγων ω Σωκρατες ουχ οιος τ' εσει ημιν εξελθων ζην τουτι δη εστι παντων χαλεπωτατον πεισαι τινας υμων εαν τε γαρ λεγω οτι τω θεω απειθειν τουτ' εστι και δια τουτ' αδυνατον ησυχιαν αγειν ου πεισεσθε μοι ως ειρωνευομενω εαν τ' αυ λεγω οτι ο ανεξεταστος βιος ου βιωτος ανθρωπω τουτο ετι ηττον πεισεσθε μοι λεγοντι.

Translate into Greek:—

Unless it happen either that philosophers acquire the kingly power in states, or that those who are now called kings and potentates, be imbued with a sufficient measure of genuine philosophy, that is to say, unless political power and philosophy be united in the same person, most of those minds which at present pursue one to the exclusion of the other being peremptorily debarred from either, there will be no deliverance for cities, nor yet, I believe, for the human race.

JOHN RYALL, *Professor.*

LATIN.—FIRST YEAR'S SCHOLARSHIPS.

1. Give an account of the war with Jugurtha.
2. Describe the situation of Pompeii, Patavium, Camulodunum, and Saguntum. Trace the course of the rivers Athesis, Tiber, and Sequana.
3. How is the word "any" translated into Latin?
4. Give the rules for the Alcaic metre, with examples from Horace.
5. How did the Romans reckon interest?

Re-translate into Latin:—

Here you see the Athenians, whence humanity, learning, religion, the fruits of the earth, the rights and laws of mankind, are thought to have been first propagated, for the possession of whose city the gods themselves are said to have contended on the account of its beauty; which is of so great antiquity, that it is reported to have brought forth its own citizens, and the same spot to have been their parent, their nurse, and their country; and of so great authority, that the broken and shattered fame of Greece depends now singly on the credit of this city.

SECOND AND THIRD YEARS' SCHOLARSHIPS.

Translate in as few words as possible:—

VIRGIL—*Æneid*, vi., 724.

Principio coelum ac terras camposque liquentes
Lucentemque globum Lunae Titaniaque astra
Spiritus intus alit, totamque infusa per artus
Mens agitat molem et magno se corpore miscet.
Inde hominum pecudumque genus vitaeque volantum
Et quae marmoreo fert monstra sub aequore pontus.
Igneus est ollis vigor et coelestis origo
Seminibus, quantum non noxia corpora tardant
Terrenique hebetant artus moribundaque membra.
Hinc metuunt cupiuntque, dolent gaudentque, neque auras
Dispiciunt clausae tenebris et carcere caeco.

Translate into Latin Elegiacs:—

Enlarge my life with multitude of days,
In health, in sickness, thus the suppliant prays;
Hides from himself his state, and shuns to know,
That life protracted, is protracted woe.

Appendix B.

Examination Papers for Scholarships.

Time hovers o'er, impatient to destroy,
And shuts up all the passages of joy;
In vain their gifts the bounteous seasons pour,
The fruit autumnal, and the vernal flow'r;
With listless eyes the dotard views the store,
He views, and wonders that they please no more.

Translate into Latin prose:—

He was fond of licence and pleasure, but not even his ruling passions ever withdrew him from the most regular attendance to public business and the affairs of his kingdom. His knowledge of mankind was profound, and he had sought it in the private walks of life, in which he often personally mingled; and, though naturally proud and haughty, he hesitated not, with an inattention to the arbitrary divisions of society, which was then thought something portentously unnatural, to raise from the lowest rank men whom he employed on the most important duties, and knew so well how to choose them, that he was rarely disappointed in their qualities.

SENIOR SCHOLARSHIP.

Subject for a Latin essay:—

"E cælo descendit γνῶθι σεαυτόν"

Translate into Latin lyrics:—

Ye winds, that have made me your sport,
  Convey to this desolate shore
Some cordial endearing report
  Of a land I shall visit no more.

My friends, do they now and then send
  A wish or a thought after me?
O tell me I yet have a friend,
  Though a friend I am never to see.

How fleet is a glance of the mind!
  Compared with the speed of its flight,
The tempest itself lags behind,
  And the swift-winged arrows of light.

When I think of my own native land,
  In a moment I seem to be there;
But alas! recollection at hand,
  Soon hurries me back to despair.

B. LEWIS, *Professor.*

ENGLISH LANGUAGE.—LITERARY SCHOLARSHIPS OF THE FIRST YEAR.

1. Give the derivation of the following words:—*apprehend, censure, concussion, incidence, prevent, resent;* and point out any changes of signification which some of these words have undergone.

2. Analyse this sentence:—

Fame is the spur that the clear spirit doth raise
(That last infirmity of noble mind)
To scorn delights and live laborious days.

3. State what you know about the analysis of sentences. On what principle is that method of analysis founded?

4. What is the English language? Is it pure or mixed?

5. What is meant by the Latin of the First and of the Second Period?

HISTORY.

6. Describe the administration of the Thirty Tyrants, and the enterprise of Thrasybulus.
7. Explain the causes of the Civil War between Cæsar and Pompey.

ENGLISH LANGUAGE AND LITERATURE.—LITERARY SCHOLARSHIPS OF THE SECOND AND THIRD YEARS.

1. Trace the origin and development of the Anglo-Saxon and Norman-French elements in the English language.
2. Give some account of the "Ormulum."
3. Write a short life of Edmund Spenser, with an enumeration of his writings.
4. Consider the poetic influence of Ben Jonson.
5. What was Drayton's "Polyolbion"?
6. Characterize the poetry of Donne.
7. Sketch the plot of "Julius Cæsar."
8. Explain the following passages:—

(*a*). If it were done, when 'tis done, then 'twere well
It were done quickly.

(*b*). If the assassination
Could trammel up the consequence, and catch
With his surcease, success; that but this blow
Might be the be-all and the end-all here,
But here upon this bank and shoal of time,
We'd jump the life to come.

(*c*). Will all great Neptune's ocean wash this blood
Clean from my hand? No; this my hand will rather
The multitudinous seas incarnardine,
Making the green one red.

Do you prefer "incarn*ar*dine" or "incarn*a*dine"?

Do you construe "making the green one—red" or "making the green—one red"?

ENGLISH LANGUAGE, LITERATURE, AND COMPOSITION.—SENIOR SCHOLARSHIP.

1. Show that the English Language, like the Law and the Constitution of the country, partakes of the nature of a compromise.
2. What is Literature? Consider the departments of Poetry, History, Oratory, and Philosophy, and suggest a useful course of English reading in each department.
3. What is Composition? What are the best exercises in English composition, with a view to improvement, (1) in diction, (2) in the arrangement of thoughts?

HISTORY.

4. What was the origin of the Feudal System? Distinguish between alodial and feudal tenures. At what period did alodial tenures chiefly become feudal, and what was the cause of this change?
5. Describe the ceremonies used in conferring a fief; and enumerate the principal feudal incidents.
6. What causes led to the decline of the Feudal System?
7. What was the constitution of the Witenagemot?
8. Give a brief account of the Anglo-Norman constitution.
9. Explain the changes which took place in English jurisprudence during the reign of Henry II.
10. Trace the origin and establishment of Trial by Jury.

WILLIAM RUSHTON, *Professor.*

Appendix B.

Examination Papers for Scholarships.

MODERN LANGUAGES.

Translate into French, or Italian, or German:—

Times glide on; fortune is inconstant; tempers are soured; bonds which seemed indissoluble are daily sundered by interest, by emulation, or by caprice. But no such cause can affect the silent converse which we hold with the highest of human intellects. That placid intercourse is disturbed by no jealousies or resentments. They are the old friends who are never seen with new faces, who are the same in wealth and in poverty, in glory and in obscurity. With the dead there is no rivalry. In the dead there is no change. Plato is never sullen. Cervantes is never petulant. Demosthenes never comes unseasonably. Dante never stays too long. No difference of political opinion can alienate Cicero. No heresy can excite the horror of Bossuet. Nothing, then, can be more natural than that a person endowed with sensibility and imagination should entertain a respectful and affectionate feeling towards those great men with whose minds he holds daily communion.—MACAULAY.

1. Explain the difference existing in the French language between the Imperfect and the Preterite of the Indicative mood, and illustrate it by examples.
2. Explain the signification of the following words, with examples:—*corvée, jurande, gabelle, taille, tiers-état.*
3. Mention and characterize the principal tragedies of Racine.
4. Which was the most brilliant epoch of French literature?
5. What was the moral and intellectual influence of Port Royal?
6. Give a brief account of the origin and formation of the Italian language.
7. State what you know of the life and times of Dante.
8. Explain the influence of English literature on that of Germany.
9. State what you know of Klopstock, and characterize his epic poem.
10. Give your opinion as to the tendency of the different literatures of modern Europe.

R. DE VERICOUR, *Professor.*

METAPHYSICS.—SENIOR SCHOLARSHIP.

1. How far is the objection that Metaphysics is not a progressive science justified by facts?
2. Is there any resemblance between Leibnitz's theory of Monads and the conclusions of Spinoza?
3. In what sense did Berkeley deny the existence of matter? Examine his arguments.
4. Explain what is meant by Ideas of Reflection in Locke's system.
5. What province is assigned to the idea of "Time" by Kant?
6. Explain and discuss the answers to Hume's scepticism which result from the system of Kant.
7. What objections have been brought against Kant's own system?
8. What is meant by the "Eclectic" system? On what principles is it based?
9. Criticise Reid's account of first principles.
10. Upon what does our conviction of the truth of mathematical axioms depend?
11. Give the arguments upon which Sir W. Hamilton rests the evidence of his law of the relation between Sensation and Perception. Are they satisfactory?
12. In what sense is the imagination a "creative" faculty?

LOGIC.—SENIOR SCHOLARSHIP.

1. Is judgment or simple apprehension the more elementary form of thought?
2. To what extent is accurate definition a protection against error in reasoning?
3. What are "categories"? Have they any but an ideal existence? What is the best list of them?
4. Is there any *inference* in opposition and conversion?
5. How does the law of contradictory terms affect conversion by negation?
6. What is the province of the major premiss according to Mill? Examine his view.
7. What is the most common cause of fallacies of petitio principii?
8. Why is it unnecessary to subdivide fallacies of ratiocination?

Appendix B
Examination Papers for Scholarships.

9. What is the law upon which all induction depends? Upon what evidence, according to Mill, does this law rest? Discuss his account of it.

10. What are the limits to the value of arguments from analogy?

11. Are there any grounds for the distinction between the "inconceivable" and the "unimaginable"?

12. "Three-fourths of the army were killed; three-fourths of the army were Prussians; some who were killed were Prussians." Is the inference contained in the above capable of being reduced into one of the ordinary forms of syllogism? If so, reduce it; if not explain its nature.

G. S. Read, *Professor.*

MATHEMATICS.—FIRST YEAR'S SCHOLARSHIP.

1. Find the present value of £203 10*s.* due 7 months hence, interest at 3 per cent.

2. Prove the rule for finding the G. C. M. of two algebraical expressions; and find the G. C. M. of x^3+x^2+x+1, x^3-x^2+x-1.

3. Solve the equations—

(1) $\frac{1}{3}(x-7)+\frac{2}{5}(x-8)=\frac{6}{9}(5x-1)$.

(2) $(x-7)\,(x-4)\,(x-6)=(x-5)\,(x-2)\,(x-10)$.

(3) $\sqrt{x-1}+\sqrt{x-2}=\sqrt{2x}$.

4. Show how to sum an arithmetical progression—

Ex. $\overline{a+b}+\overline{a-3b}+\overline{a-7b}+\ldots$ to s terms.

5. Show that Euclid's definition of proportion is equivalent to the algebraical definition—

If $a : b :: c : d$ show that $a^3-b^3 : a^3+b^3 :: c^3-d^3 : c^3+d^3$.

6. The square on the hypothenuse of a right-angled triangle is equal to the sum of the squares on the sides of the triangle?

7. Show how to divide a given straight line into two parts, so that the rectangle contained by the whole line and one part may be equal to the square on the other part.

8. Show how to draw a tangent to a given circle from a given external point.

9. Describe a circle touching two given lines, and passing through a given point.

10. Prove that $\sin^2 A+\cos^2 A=1$. And that if $\tan A=\frac{a}{b}$ then $\sin A=\frac{a}{\sqrt{a^2+b^2}}$.

11. Find the sine and cosine of 45°.

12. Prove that $\sin(A+B)=\sin A\cos B+\cos A\sin B$. Hence deduce $\sin A+\sin B=2\sin\frac{A+B}{2}\cos\frac{A-B}{2}$.

13. Prove the following identities—

(1) $\sin(45^\circ-A)+\cos(45^\circ-A)=\sqrt{2}\cos A$.

(2) $\sec^2\theta+\operatorname{cosec}^2\theta=4\operatorname{cosec}^2 2\theta$.

(3) $\frac{\sin 3\theta+\sin 5\theta}{\sin 2\theta+\sin 6\theta}=\cos\theta\sec 2\theta$.

SECOND YEAR'S SCHOLARSHIP.

1. Solve equations—

(1) $\sqrt{x-1}+\sqrt{x-2}=\sqrt{2x-3}$.

(2) $3x^4+x^2(12a-2)+9a^2=1$.

(3) $\left.\begin{array}{l} x^n-y^n=ax^{\frac{n}{2}}y^{\frac{n}{2}} \\ x-y=bxy \end{array}\right\}$

2. Give an accurate definition of a fraction. Thence prove $\frac{a}{b}+\frac{c}{d}=\frac{ad+bc}{bd}$. How must the ordinary definition be extended to prove that $\frac{a}{b}\times\frac{c}{d}=\frac{ac}{bd}$ and $\frac{a}{b}\div\frac{c}{d}=\frac{ad}{bc}$?

Appendix B.

Examination Papers for Scholarships.

3. Show that the value of the fraction $\frac{la^n+mc^n+re^n+\dots}{lb^n+md^n+rf^n+\dots}$ lies between the greatest and least of the fractions $\frac{a^n}{b^n}$, $\frac{c^n}{d^n}$, &c.

4. Prove that

$$(a-b)^n+n.(a-b)^{n-1}.\,2b+\frac{n(n-1)}{1.2}(a-b)^{n-2}\,2^2b^2+\text{ \&c.}$$

$$=(a+3b)^n-n\,(a+3b)^{n-1}.\,2b+\frac{n(n-1)}{1.2}(a+3b)^{n-2}\,2^2b^2-\text{ \&c.}$$

5. Expand a^x in powers of x.

Sum the series $1+\frac{x}{\underline{|2}}+\frac{x^2}{\underline{|4}}+\frac{x^3}{\underline{|6}}+\dots$

6. Prove the identities—

(1) $\frac{\sin 3\theta+\sin 5\theta}{\sin 2\theta+\sin 6\theta}=\cos\theta.\sec 2\theta.$

(2) $(3+2\sin 2\theta)\sin(\theta+\frac{\pi}{4})+\cos(3\theta+\frac{\pi}{4})=4\sin(\theta+\frac{\pi}{4}).$

7. Solve the equations—

(1) $\tan(\theta-a)-\tan(\theta+a)=2\tan a.$

(2) $\begin{cases}\tan\theta\tan\phi+\tan\phi\tan\psi+\tan\psi\tan\theta=\tan\theta\tan\phi\tan\psi\\ l\theta+m\phi+n\psi=0.\\ \cos\theta=\sin\phi.\end{cases}$

8. Show that $\sin\theta<\theta>\theta-\frac{\theta^3}{4}$.

Find accurately to five places of decimals the sine of 10″.

9. In any triangle show that $c^2=a^2+b^2-2ab\cos C$. Find the values of $\sin\frac{C}{2}$ and $\cos\frac{C}{2}$ in terms of s, a, b, c.

10. A ladder resting against a vertical wall and on a horizontal plane, in a plane perpendicular to the two planes, begins slowly to slide down. Find by Euclid the curve described by the middle point of the ladder.

11. Find by Euclid's method the locus of a point whose distance from a given point is always in a constant ratio to its distance from a second given point.

THIRD YEAR'S SCHOLARSHIP.

1. Solve the equations—

(1) $3x^4+x^2(12a-2)+9a^2=1.$

(2) $\begin{cases}x^n-y^n=ax^{\frac{n}{2}}y^{\frac{n}{2}}\\ x-y=bx\,y\end{cases}$

2. Show that the value of the fraction $\frac{la^n+mc^n+re^n+\dots}{lb^n+md^n+rf^n+\dots}$ lies between the greatest and least of the fractions $\frac{a^n}{b^n}$, $\frac{c^n}{d^n}$, &c.

3. Sum the series $1+\frac{x}{\underline{|2}}+\frac{x^2}{\underline{|4}}+\frac{x^3}{\underline{|6}}+\dots$

4. Find the relation that exists between the roots and coefficients of an algebraical equation of the nth degree.

5. If α, β, γ, &c., be the roots of the equation $x^{4n}+px^{2n}+q=0$, show $\alpha^{2r+1}+\beta^{2r+1}+\gamma^{2r+1}+\dots=0.$

6. Eliminate x and y from the equations—

$$ax^2+2bxy+cy^2=d$$
$$a'x^2+2b'xy+c'y^2=d'$$
$$a''x^2+2b''xy+c''y^2=d''$$

expressing the result in the form of a determinant.

7. Prove Demoivre's theorem—

Show that $\left(\frac{1-\sqrt{-1}\tan\theta}{1+\sqrt{-1}\tan\theta}\right)^{\sqrt{-1}}=\varepsilon^{2\theta}$.

8. In the parabola show that the two tangents drawn to the curve from any external point subtend equal angles at the focus.

9. In the ellipse prove that the locus of interscetion of the tangent with the perpendicular on it from the focus is a circle whose radius is equal to half the major axis.

10. Find the limit of $(1+x)^{\frac{1}{x}}$ when x is indefinitely diminished.

11. Prove Taylor's theorem—

Expand $\log\{1+e^x\}$ in powers of x for the first five terms.

12. Show how to find the maxima or minima values of a function of one independent variable.

13. Find the area of the greatest triangle that can be inscribed in a given circle.

14. Show how to find the evolute of a given curve. Show that the evolute of an equiangular spiral is a similar curve.

15. Define the integral $\int_a^b \phi(x)\, dx$, and show directly from some definition that the integral of $\cos x$ is $\sin x$.

16. Find the whole area of the curve $r=a(\sin\theta+\cos\theta)$.

NATURAL PHILOSOPHY.—SENIOR SCHOLARSHIP.

1. Find the centre of gravity of the segment of a sphere cut off by a given plane.

2. When a system of bodies are in equilibrium under the action of gravity the centre of gravity of the system is at a maximum or minimum height; apply this principle to determine the position of equilibrium of a heavy beam resting on two smooth inclined planes.

3. In a central orbit prove that every *apsidal* line divides the orbit into two parts which are equal and similar?

4. One particle begins to fall from the higher extremity of a vertical line, and at the same instant another is projected upwards from the other extremity with a given velocity, the particles moving in a medium of which the resistance varies directly as the velocity; find the time at which they will meet.

5. Describe and explain the phenomena which are seen on observing a small hole in an opaque screen.

6. How would you cause a current to rotate round the pole of a magnet?

7. How would you determine when Venus is at its maximum brightness?

8. Find the relation between the true and eccentric anomalies.

JOHN ENGLAND, *Professor.*

CHEMISTRY.—SENIOR SCHOLARSHIPS IN ARTS OF THE FOURTH YEAR.

1. What is the distinction between equivalents, atoms, and molecules?

2. Write the formulæ of primary, secondary, and tertiary monamines, produced by the substitution of an alcohol compound radical for the typical hydrogen. To which of these classes do the natural alkaloids belong?

3. Give the different processes for preparing ozone. What are its properties, and how is its presence in the atmosphere detected?

4. Write some of the oxides that are isomorphous with magnesia and with sesquioxide of iron. Illustrate in symbols the doctrine of isomorphism by the formation of different alums from oxides, isomorphous with potash, and with alumina.

5. Give an outline of the metallurgy of lead, and of the process for extracting economically from it the small quantity of silver which it contains.

6. What is the rule by which you judge of the neutrality of the salts of monobasic, bibasic, and tribasic acids? Illustrate these rules by formulæ of each class of acids with a protoxide and with a sesquioxide.

Appendix

Examination Papers for Scholarships.

7. How is the hypothetical density of a vapour ascertained?

8. How is hypochlorous acid prepared? Give its composition by weight and by volume, its properties, and the mode of preparing its most valuable compound with lime.

9. Explain the nature of homologous series, and describe the process for preparing the ketones of the different series.

10. One hundred grains of a vegetable alkaloid give on combustion with oxide of copper and with soda lime—

$$\begin{array}{l} C = 71{\cdot}58 \\ H = 6{\cdot}66 \\ N = 4{\cdot}91 \\ O = 16{\cdot}85 \\ \hline \quad 100{\cdot} \end{array}$$

100 grains of the double salt of bichloride of platinum and the alkaloid give on combustion 20·14 grains metallic platinum. Calculate the formula of the alkaloid—Pt = 99.

11. How is ascetic acid prepared in the quick German process? Show by symbols what substance is apt to be formed if there is a deficient supply of air. State the homologous series to which ascetic acid belongs.

12. In the square prismatic system, what are the relations and the positions of the lateral axes of the primary and of the secondary octohedron? Give the notation of the faces of both octohedrons and of the prism with terminal face derived from the inverse octohedron.

J. Blyth, *Professor.*

Natural History.—Senior Scholarship.

1. When are the ends of scientific classification best answered?

2 Explain the general truth, that there are in nature distinctions of Kind.

3. Distinguish between the nomenclature and terminology of botanical science.

4. Define the terms—*ligule*, *glume*, *corona*, *carpophore*, and *cupule*, adding illustrative examples.

5. Describe the structure of an ordinary anther, and the development of its pollen-grains.

6. Give some account of the geographical distribution of the Gramineæ.

7. Name the primary groups of 'deciduate' Mammals, giving the characters of such as are distinguished by modifications of placental structure.

8. Indicate the more striking peculiarities of the skeleton in the Cetacea.

9. Describe the skull (or cranial region) of Amphioxus.

10. What characters are common to, and distinctive of, the true Mollusca?

J. Reay Greene, *Professor.*

Natural Philosophy.—Third Year's Scholarship in Engineering.

1. One end of a beam rests on a smooth inclined plane, the other end is supported by a cord; required the tension in the cord, and the inclination of the cord to the beam, when the beam rests horizontally.

2. The resultant of two forces P and A trisects the angle between their directions; find this angle.

3. A weight P hanging vertically draws an equal weight up a smooth inclined plane, rising 2 in 3, by a string which passes along the plane; required the accelerating force and the tension in the string.

4. Two given circles lie without each other in the same vertical plane; determine the straight line of quickest descent from one to the other.

5. Describe the continuation of the *eye-piece* usually employed in the terrestrial telescope.

6. What do you mean by the mechanical equivalent of heat?

7. How, by means of the electrical machine, would you prove that electricity can produce heat and chemical action?

8. By what experiments is it usual to show that electricity resides on the surface of a charged body? Is this statement strictly accurate?

John England, *Professor.*

GEOLOGY AND MINERALOGY.—THIRD YEAR'S ENGINEERING SCHOLARSHIPS.

1. What are the Felspars which enter into the composition of Granite; and in what respects do these differ from the Felspars of Igneous Rocks?

2. What influence have currents on the characters of Sedimentary Rocks? and give examples of this influence.

3. Name the areas in Ireland where Metamorphic Rocks occur; and what are the kinds of Metamorphic Rocks in these areas?

4. To what portions of the Silurian system are the Rocks of this system in Ireland referable?

5. In what respects does the Rhœtic formation of the British Islands differ from that of Austria.

6. To what formation is the Molasse of Switzerland referable; and what are the fossils which occur therein?

7. To what group of fossils does *Paradoxoides* belong; and what zone does it characterize?

8. Name, and refer to their position in the animal kingdom, some of the most interesting fossils which have been obtained from the Stonesfield Slate.

9. What genus of shells occurs in the greatest abundance in the Calcaire Grossier?

10. In what respect does Dolomitic Limestone differ from ordinary Limestone; and under what circumstances does it occur in the south of Ireland?

11. As regards composition, in what respect do Zeolites differ from Felspars?

12. Name, and give the external characters, of the three minerals which are composed of Iron and Sulphur.

ROBERT HARKNESS, *Professor.*

CHEMISTRY.—SCHOLARSHIPS IN MEDICINE AND ENGINEERING.

N.B.—The name and faculty of each student are to be written on the first page of each book.

1. What is the composition of the atmosphere by weight and by volume? How is its uniformity of composition accounted for?

2. Give the different processes for obtaining nitrogen from the air and from ammonia. State the composition by weight and by volume of the oxygen compounds of nitrogen.

3. How are chlorine and hydrochloric acid prepared? Give the properties of each.

4. Give the mode of preparation and the properties of HF, and its action on silicate of potash and alumina.

5. What is meant by the theory of volumes? Give according to this theory the formation by synthesis of ammonia, hydrochloric acid, water, and sulphuretted hydrogen.

6. Into how many classes are acids arranged? Write the formulæ of the three hydrates which PO_5 forms, according to the two theories of the constitution of acids.

7. In lead there exists a small quantity of silver; how can this be economically extracted from the mass of lead?

8. How is teroxide of antimony prepared from the native sulphide? What is the action of water upon it? How would you distinguish the product of this action from the similar one produced by water on chloride of bismuth?

9. The terminal edges of the octohedron of the square prismatic system are truncated by planes, which by increasing replace the original faces; what new figure is formed? Give the notation of its faces, and of the prism derived from it.

10. How would you detect hydrocyanic acid vapour? Give the reactions in symbols with the different reagents you employ.

11. How is acetic acid formed in the quick German process? Show by symbols what substance is apt to be produced instead of acetic acid, if there is not a sufficient supply of air. State the homologous series to which acetic acid belongs.

Appendix B. — Examination Papers for Scholarships.

12. Explain the difference between an equivalent, an atom, and a molecule.

13. When monatomic sodium acts on hydrochloric acid and on ammonia, how many new compounds are possible in each case? Explain this by the atomicity of the elements.

14. Illustrate both by atomic and by molecular notation, the action of chlorine and of oxygen on hydriodic acid.

J. Blyth, *Professor.*

FACULTY OF MEDICINE.

Physics.—Scholarships of Second Year.

1. A bar 12 feet long has a weight of 120 lbs. placed at one end and a weight of 40 lbs. at the other; at what point should a prop be placed to support it?

2. A heavy body in falling is observed to describe 176 feet in one second; what is the entire space which it has passed over?

3. Two bodies are projected from the same point at the same instant, the one vertically upward with a velocity of 100 feet per second, the other horizontally with a velocity of 20 feet per second; what distance will they be from each other at the end of four seconds?

4. Explain the principle of the camera lucida.

5. Explain the use of a concave glass to a short-sighted person. What rule would you give for determining its focal length?

6. By what means can polarized be distinguished from ordinary light?

7. Describe some experiments to prove that different solids expand differently when heated through equal changes of temperature.

8. One lb. of ice is placed in one gallon of water at a temperature of 120° Fah.; what will be the temperature when the ice is entirely dissolved?

9. How by means of a dipping needle would you approximately determine the magnetic meridian?

10. A gold leaf electroscope is charged with electricity; how would you ascertain whether the charge was positive or negative?

11. Describe Bunsen's battery.

12. Explain the reduction of copper from a solution of its sulphate by the passage of a current of electricity through it.

John England, *Professor.*

Botany.—Scholarships of Second Year.

1. Compare the order Scrophularineæ, on the one hand, with Labiatæ, on the other, with Solanaceæ.

2. 3. Name the British genera and species of Solanaceæ, adding their distinctive characters.

4. Define the terms—*internode*, *plumule*, *connective*, *gynæcium*, and *raphe.*

5. Describe the spore-fruit of Equisetum.

Zoology.

1. Describe the proglottis of a Tape-worm.

2. Name any groups of Invertebrata in which the heart is distinct and unilocular.

3. Define the Lizards properly so called (Sauria s. Lacertilia), distinguishing them from Crocodilians and Ophidians.

4. Give the dental formula of the Marmosets, comparing it with that of the typical Platyrhini.

5. What families of hoofed quadrupeds occur in Southern and Tropical America.

J. Reay Greene, *Professor.*

Appendix B.

Examination Papers for Scholarships.

ANATOMY AND PHYSIOLOGY.—SCHOLARSHIPS OF THE SECOND YEAR.

1. What are the constituents of the blood?
2. What are the proportions of albumen and fibrine in the normal state of the blood?
3. What are the microscopic features of the red corpuscles of the human blood?
4. State the general properties of cartilage, and describe the appearance of this tissue when examined under the microscope.
5. Describe the structure and arrangements of the pia mater of the brain.
6. Mention the names of and course of the blood through the cranial sinuses.
7. State the parts brought in view, on incising the kidney, from the renal fissure to the convex border.
8. State the relations of the trachea in the neck and chest; then describe the arrangements of the different parts which enter into its composition.

PRACTICAL ANATOMY.—SCHOLARSHIPS OF THE THIRD YEAR.

1. Describe the rectus abdominis muscle.
2. Describe the origin, insertion, and relations of the peroneus longus muscle.
3. Describe the internal and external lateral ligaments of the ankle joint.
4. Describe the spermatic canal, the internal and external abdominal rings.
5. Describe the origin, course, relations, and anastomoses of the deep epigastric artery.
6. Describe the superficial veins of the lower extremity.
7. Describe the origin, course, and branches of the ulnar nerve.

ANATOMY AND PHYSIOLOGY.—SCHOLARSHIPS OF THE THIRD YEAR.

1. What are the structures composing the coats of veins, and how are they disposed? What are the parts of the venous system, which present special arrangements?
2. Describe the general construction of the chest and the respiratory movements; mention the muscles and nerves concerned in these functions.
3. How is the influence of the nervous system on gastric digestion manifested?
4. What are the changes effected on alimentary substances in the small intestines?
5. What is the structure of the intestinal villi?
6. Describe the origin, course, and distribution of the phrenic nerve.
7. Describe the third ventricle of the brain.

PRACTICAL ANATOMY.—FOURTH YEAR SCHOLARSHIP.

1. Describe the tunica vaginalis, and the tunica albuginea testis.
2. Describe the spermatic cord, the structure, and course of the vas deferens.
3. Describe the fascia iliaca.
4. Describe the fascia transversalis abdominis.
5. Describe the acceleratores urinæ muscles.
6. Describe the triangular ligament of the urethra.
7. Describe the origin, course, and relations of the internal pudic artery.
8. Describe the obturator nerve.
9. Describe the inferior thyroid artery.

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1. Trace the common bile duct from the duodenum intestine upwards towards the liver, and describe the arrangements of the offsets to their terminations; also state the structures entering into the biliary apparatus.
2. State the composition and use of the bile.

Appendix B.

Examination Papers for Scholarships.

3. State the difference, both physical and chemical, between venous and arterial blood.
4. State the structure, connexions, and office of the membrana tympani.
5. State the connexions and structure of the optic thalami.
6. How is spherical aberration corrected in the eye?
7. Describe the lachrymal puncta, ducts sac, and nasal duct.
8. State the origin, course, branches of communication, and distribution of the glosso-pharyngeal nerve; also state its office.

J. H. Corbett, *Professor.*

Midwifery.—Fourth Year's Scholarship.

1. Enumerate the peculiarities of the "masculine pelvis" and of the "ovate pelvis." What character of labour is to be expected with each of these varieties?
2. State the symptoms which are to be observed in the progress of a case of uterine hydatids, and its diagnosis from one of ordinary pregnancy; also its pathology, prognosis, and treatment.
3. If the head of the child enter the pelvis in the third position, and continue its course without change, how will it emerge from the outlet; and how will the progress of the labour be affected by the position remaining unchanged?
4. What indications in the condition of the pregnant woman would lead you to apprehend an attack of convulsions; and what means would you take to try and ward them off?
5. State in what forms of uterine hemorrhage you would have recourse to the plug, and in what forms you would not; and give your reasons.
6. Give an outline of the symptoms, pathology, and treatment of phlegmasia dolens.

J. (R.) Harvey, A.B. M.D., *Professor.*

Pathology.—Fourth Year's Scholarship.

1. What alterations are found in the properties of the urine in Bright's disease of the kidneys; how do you proceed to ascertain these changes?
2. How do you test for sugar in diabetic urine? What is the cause of its presence in this disease?
3. In what diseases does it appear secondarily?
4. What is the effect of adherent pericardium on the size of the heart? If there is any difference of opinion amongst writers on the subject state it, and also the cause of this difference.
5. What is the cause of increased heat in fever?
6. Enumerate some of the forms which exudate lymph assumes.
7. What organs are mainly affected in pyemia, and why these organs?
8. In what conditions are miasmatic emanations produced?
9. How do you explain the cramps, blue skin, and delirium in Asiatic cholera?
10. How do you diagnose it from endemic cholera?
11. What is the cause of the prevalence of hepatic affections in tropical climates?
12. What organs affect most in the different periods of life—namely, in infancy, childhood, and adult life?

D. C. O'Connor, M.D., *Professor*

Materia Medica.—Third Year Scholarships.

1. Give the characters, properties, test, physiological action, therapeutical applications, modes of administration, and doses of *Podophyllin.*
2. How is the *Pulvis Ferri* chemically distinguished from the *Magnetic Oxide?*
3. Give the characters, properties, tests, physiological action, therapeutical applications, mode of administration, and doses of *Muriate of Ammonia.*
4. Give the composition, tests, mode of detecting adulterations, advantages, and disadvantages of *Hydrocyanic Acid.*

AppendixB.

Examination Papers for Scholarships.

5. Give the doses of *Muriate of Morphia, Elaterium, Strychnia, Bismuth,* and *Croton Oil.*
6. Describe the reactions which take place in the preparation of *Chloroform, Ether,* and *Valerianate of Soda.*
7. Give the natural history, constituents, physiological action, therapeutical uses, preparations, doses, and mode of administration of *Opium.*

THERAPEUTICS.—SENIOR SCHOLARSHIPS.

1. What changes can be effected in the functions of the *nervous system* by therapeutical agents?
2. How does *Morphia* differ in physiological action and therapeutical uses from *crude Opium?*
3. Give a general outline of the therapeutical applications of *stimulants,* classifying them according to the portions of the nervous system which they specially influence.
4. Contrast the therapeutical results of *Quinine* with those of *Arsenic* in the treatment of intermittent affections.
5. Give the relative value of the more generally employed *preparations of iron.*
6. Contrast the action of *Diaphoretics* with that of *Diuretics* in the treatment of Ascites.
7. How does the astringent action of *Acetate of Lead* differ from that of *Sulphuric Acid?*

PURCELL O'LEARY, *Professor.*

APPENDIX C.

AppendixC.

List of the Students who obtained Honors or Prizes at the Sessional Examinations.

LIST of the STUDENTS who obtained HONORS or PRIZES at the SESSIONAL EXAMINATIONS held in June, 1867.

GREEK (Third Year).	
Benjamin Hamilton,	1st.
GREEK (Senior).	
Joseph O'Brien,	1st.
Thomas Rearden,	2nd, equal.
Michael Finnucane,	2nd, equal.
Maurice Daly,	3rd.
James Magill,	5th.
GREEK (Junior).	
Timothy Nevill,	2nd.
Charles Crookshank,	3rd, equal.
James Ring,	3rd, equal.
LATIN (Third Year).	
William G. Fitzgerald,	1st, equal.
Benjamin Hamilton,	1st, equal.
John O'Driscol,	3rd.
Michael Molony,	4th.
LATIN (Senior).	
Joseph O'Brien,	1st,
Maurice Daly,	2nd, equal.
Michael Finucane,	2nd, equal.
James Hurley,	4th.
James Magill,	5th.
Thomas Horan,	5th.
Robert W. W. Jones,	7th.
LATIN (Junior).	
Bernard O'Connor,	1st.
Timothy Nevill,	4th.
James Ring,	6th.
FRENCH (Medical).	
Maxwell Fitzgerald,	3rd.
FRENCH (Senior).	
Bernard O'Connor,	3rd.
James Magill,	4th.
FRENCH (Junior).	
Henry Heazle,	1st.
Michael Finnucane,	2nd.
James Hurley,	3rd.
James Moran,	4th.
NATURAL PHILOSOPHY (Arts, third year).	
Arthur Anglin,	1st.
APPLIED MECHANICS.	
Joseph Thornhill,	1st.
ENGINEERING PHYSICS.	
Roderick Kane,	1st.
ENGLISH LITERATURE.	
William G. Fitzgerald,	1st.
John O'Driscol,	2nd.
HISTORY.	
William G. Fitzgerald,	1st.
Arthur Anglin,	2nd.
ENGLISH LANGUAGE.	
Thomas Horan,	1st.
James Magill,	2nd.
Robert W. W. Jones,	3rd.
MATHEMATICS (Third Year).	
Arthur Anglin,	1st.
METAPHYSICS.	
Stephen Ronan,	1st.
POLITICAL ECONOMY.	
Stephen Ronan,	1st.
LOGIC.	
Joseph O'Brien.	

Appendix C. LIST of STUDENTS who obtained HONORS or PRIZES—*continued.*

List of the Students who obtained Honors or Prizes at the Sessional Examinations.

GEOLOGY AND MINERALOGY.
Exham Phillips.
George Addy.

CHEMISTRY.
Benjamin Phillips, . . . 1st.
Exham Phillips, . . . 2nd.
Simeon Exham, . . . 3rd.

ENGINEERING (Third Year.)
Joseph Thornhill, . . 2nd.

ENGINEERING (Second Year).
Roderick Kane, . . . 1st.

ENGINEERING (First Year).
Benjamin Parkes, . . . 1st.
Exham Phillips, . . . } 2nd,
George Laffan, . . . } equal.
James Jones, . . . 4th.

ANATOMY AND PHYSIOLOGY (First Year).
James C. Holland, . . 1st.

ANATOMY AND PHYSIOLOGY (Second Year).
Alexander S. Merrick, . . 1st.
James M. Beamish, . . 2nd.
Matthew M. O'Connell, . 3rd.

PRACTICAL ANATOMY (Second Year).
Matthew M. O'Connell, . 1st.
Alexander S. Merrick, . 2nd.

PRACTICAL ANATOMY (Third Year).
John O'Donovan, . . 1st.
John F. Fitzpatrick, . . 2nd.

PRACTICAL CHEMISTRY.
Alexander S. Merrick, . . 1st.
Samuel Young, . . . 2nd.
Samuel Hawkes, . . . 3rd.
John Enright, . . } 4th.
Charles Plowman, . . }

MATERIA MEDICA.
Alexander S. Merrick, . . 1st.
William J. Hastings, . . 2nd.
Philip Cogan, . . . 3rd.

SURGERY.
John F. Fitzpatrick, . . 1st.
Thomas Lumsden, . . } 2nd,
Timothy M'Auliffe, . . } equal.
John Donovan, . . . 4th.

MIDWIFERY.
John Dovovan, . . . 1st.
William Newsam, . . } 2nd.
James Beamish, . . . }
Timothy M'Auliffe, . . 3rd.
John F. Fitzpatrick.

PRACTICE OF MEDICINE.
Robert D. Corbett, . . } 1st,
Matthew M. Galway, . . } equal.
Patrick Cremen, . . . } 3rd,
Patrick Martin. . . . }
William T. T. Robinson, . } equal.

MEDICAL JURISPRUDENCE.
Robert D. Corbett.
Matthew M. Galway.

Appendix D.

APPENDIX D.

Selection of Papers used at the Sessional Examinations.

SELECTION OF PAPERS OF QUESTIONS USED AT THE SESSIONAL EXAMINATIONS HELD IN JUNE, 1867.

SENIOR GREEK CLASS.

Translate:—

(A.)—DEMOSTHENES—*In Midiam*, c. 21.

Οὐδὲ γὰρ αὖ τοῦτ᾽ ἔστιν εἰπεῖν, ὡς οὐ γεγενημένου πώποτ᾽ οὐδενὸς ἐκ τῶν τοιούτων δεινοῦ τῷ λόγῳ τὸ πρᾶγμ᾽ ἐγὼ νῦν αἴρω καὶ φοβερὸν ποιῶ. πολλοῦ γε καὶ δεῖ. ἀλλ᾽ ἴσασιν ἅπαντες, εἰ δὲ μή, πολλοί γε, Εὔθυνον τὸν παλαίσαντά ποτ᾽ ἐκεῖνον, τὸν νεανίσκον, Σώφιλον τὸν παγκρατιαστήν (ἰσχυρός τις ἦν, μέλας, εὖ οἶδ᾽ ὅτι γιγνώσκουσί τινες ὑμῶν ὃν λέγω,) τοῦτον ἐν Σάμῳ ἐν συνουσίᾳ τινὶ καὶ διατριβῇ οὕτως ἰδίᾳ, ὅτι τύπτων αὐτὸν ὑβρίζειν ᾤετο, ἀμυνάμενον οὕτως ὥστε καὶ ἀποκτεῖναι. ἴσασιν Εὐαίωνα πολλοὶ τὸν Λεωδάμαντος ἀδελφὸν ἀποκτείναντα Βοιωτὸν ἐν δείπνῳ καὶ συνόδῳ κοινῇ διὰ πληγὴν μίαν. οὐ γὰρ ἡ πληγὴ παρέστησε τὴν ὀργήν, ἀλλ᾽ ἡ ἀτιμία· οὐδὲ τὸ τύπτεσθαι τοῖς ἐλευθέροις ἐστὶ δεινόν, καίπερ ὂν δεινόν, ἀλλὰ τὸ ἐφ᾽ ὕβρει. πολλὰ γὰρ ἂν ποιήσειεν ὁ τύπτων, ὦ ἄνδρες Ἀθηναῖοι, ὧν ὁ παθὼν ἔνια οὐδ᾽ ἂν ἀπαγγεῖλαι δύναιθ᾽ ἑτέρῳ, τῷ σχήματι, τῷ βλέμματι, τῇ φωνῇ, ὅταν ὡς ὑβρίζων, ὅταν ὡς ἐχθρὸς ὑπάρχων, ὅταν κονδύλοις, ὅταν ἐπὶ κόρρης. ταῦτα κινεῖ, ταῦτ᾽ ἐξίστησιν ἀνθρώπους αὑτῶν, ἀήθεις ὄντας τοῦ προπηλακίζεσθαι. οὐδεὶς ἄν, ὦ ἄνδρες Ἀθηναῖοι, ταῦτ᾽ ἀπαγγέλλων δύναιτο τὸ δεινὸν παραστῆσαι τοῖς ἀκούουσιν οὕτως, ὡς ἐπὶ τῆς ἀληθείας καὶ τοῦ πράγματος τῷ πάσχοντι καὶ τοῖς ὁρῶσιν ἐναργὴς ἡ ὕβρις φαίνεται.

Appendix D.

Selection of Papers used at the Sessional Examinations.

1. Analyse carefully the construction of that portion of the extract from *ἀλλ' ἴσασιν ἅπαντες* to *ὥστε καὶ ἀποκτεῖναι.*

2. Explain the following legal terms—*ἐξούλη, εἰσαγγελία, προβόλη, παραγραφή, ὑπωμοσία, ἀνθυπωμοσία.*

3. Translate and comment on the following passage:—*δίκην δὲ τούτῳ λαχὼν ὕστερον τῆς κακηγορίας εἷλον ἐρήμην, οὐ γὰρ ἀπήντα· λαβὼν δ' ὑπερήμερον καὶ ἔχων, οὐδενὸς ἡψάμην πώποτε τῶν τούτου, ἀλλὰ λαχὼν ἐξούλης πάλιν οὐδέπω καὶ τήμερον εἰσελθεῖν δεδύνημαι· τοσαύτας τέχνας καὶ σκήψεις οὗτος εὑρίσκων ἐκκρούει.*

(B.)—Thucydides, book i., c. 12.

Ἐπεὶ καὶ μετὰ τὰ Τρωικὰ ἡ Ἑλλὰς ἔτι μετανίστατό τε καὶ κατῳκίζετο, ὥστε μὴ ἡσυχάσασαν αὐξηθῆναι. ἥ τε γὰρ ἀναχώρησις τῶν Ἑλλήνων ἐξ Ἰλίου χρονία γενομένη πολλὰ ἐνεόχμωσε, καὶ στάσεις ἐν ταῖς πόλεσιν ὡς ἐπὶ τὸ πολὺ ἐγίγνοντο, ἀφ' ὧν ἐκπίπτοντες τὰς πόλεις ἔκτιζον. Βοιωτοί τε γὰρ οἱ νῦν ἑξηκοστῷ ἔτει μετὰ Ἰλίου ἅλωσιν ἐξ Ἄρνης ἀναστάντες ὑπὸ Θεσσαλῶν τὴν νῦν Βοιωτίαν, πρότερον δὲ Καδμηίδα γῆν καλουμένην ᾤκισαν (ἦν δὲ αὐτῶν καὶ ἀποδασμὸς πρότερον ἐν τῇ γῇ ταύτῃ, ἀφ' ὧν καὶ ἐς Ἴλιον ἐστράτευσαν), Δωριῆς τε ὀγδοηκοστῷ ἔτει ξὺν Ἡρακλείδαις Πελοπόννησον ἔσχον. μόλις τε ἐν πολλῷ χρόνῳ ἡσυχάσασα ἡ Ἑλλὰς βεβαίως καὶ οὐκέτι ἀνισταμένη ἀποικίας ἐξέπεμψε, καὶ Ἴωνας μὲν Ἀθηναῖοι καὶ νησιωτῶν τοὺς πολλοὺς ᾤκισαν, Ἰταλίας δὲ καὶ Σικελίας τὸ πλέον Πελοποννήσιοι τῆς τε ἄλλης Ἑλλάδος ἔστιν ἃ χωρία. πάντα δὲ ταῦτα ὕστερον τῶν Τρωικῶν ἐκτίσθη.

1. Explain fully the historical and geographical allusions in extract (B).

2. Point out anything in the construction of the passage which you think worthy of notice.

(C.)—Translate into Greek:—

The Corcyræans, fearing that the enemy, on the strength of his victory, might sail against the city, and either rescue the men on the island, or proceed to some other violent measures, carried the men over again to the sanctuary of Juno, and kept the city under guard. The Peloponnesians, however, though victorious in the engagement, did not dare to sail against the city, but withdrew with thirteen of the Corcyræan vessels to the continent, whence they had put out.

THIRD YEAR'S GREEK CLASS.

(A.)—Translate:—

Thucydides, book iii., c. 53.

Τὴν μὲν παράδοσιν τῆς πόλεως, ὦ Λακεδαιμόνιοι, πιστεύσαντες ὑμῖν ἐποιησάμεθα, οὐ τοιάνδε δίκην οἰόμενοι ὑφέξειν, νομιμωτέραν δέ τινα ἔσεσθαι, καὶ ἐν δικασταῖς οὐκ ἐν ἄλλοις δεξάμενοι, ὥσπερ καὶ ἐσμέν, γενέσθαι ἢ ὑμῖν, ἡγούμενοι τὸ ἴσον μάλιστ' ἂν φέρεσθαι. νῦν δὲ φοβούμεθα μὴ ἀμφοτέρων ἅμα ἡμαρτήκαμεν· τόν τε γὰρ ἀγῶνα περὶ τῶν δεινοτάτων εἶναι εἰκότως ὑποπτεύομεν καὶ ὑμᾶς μὴ οὐ κοινοὶ ἀποβῆτε, τεκμαιρόμενοι προκατηγορίας τε ἡμῶν οὐ προγεγενημένης ᾗ χρὴ ἀντειπεῖν (ἀλλ' αὐτοὶ λόγον ᾐτησάμεθα) τό τε ἐπερώτημα βραχὺ ὄν, ᾧ τὰ μὲν ἀληθῆ ἀποκρίνασθαι ἐναντία γίγνεται, τὰ δὲ ψευδῆ ἔλεγχον ἔχει. πανταχόθεν δὲ ἄποροι καθεστῶτες ἀναγκαζόμεθα καὶ ἀσφαλέστερον δοκεῖ εἶναι εἰπόντας τι κινδυνεύειν· καὶ γὰρ ὁ μὴ ῥηθεὶς λόγος τοῖς ὧδ' ἔχουσιν αἰτίαν ἂν παράσχοι ὡς εἰ ἐλέχθη, σωτήριος ἂν ἦν· χαλεπῶς δὲ ἔχει ἡμῖν πρὸς τοῖς ἄλλοις καὶ ἡ πειθώ. ἀγνῶτες μὲν γὰρ ὄντες ἀλλήλων ἐπεισενεγκάμενοι μαρτύρια ὧν ἄπειροι ἦτε ὠφελούμεθ' ἄν· νῦν δὲ πρὸς εἰδότας πάντα λελέξεται, καὶ δέδιμεν οὐχὶ μὴ προκαταγνόντες ἡμῶν τὰς ἀρετὰς ἥσσους εἶναι τῶν ὑμετέρων ἔγκλημα αὐτὸ ποιῆτε, ἀλλὰ μὴ ἄλλοις χάριν φέροντες ἐπὶ διεγνωσμένην κρίσιν καθιστώμεθα.

1. Supply the ellipsis in *ὥσπερ καὶ ἐσμέν*; and point out the difference in the interpretation of the clause, according as the comma is retained or omitted after *ὑμῖν.*

2. Explain the construction of *ὑμᾶς* in the next sentence, also of *τὸ ἐπερώτημα βραχὺ ὄν*; and of *φέροντες*, in the last clause.

3. Explain fully the following historical allusions:—*ἐναυμαχήσαμεν ἐπ' Ἀρτεμισίῳ—μάχῃ τῇ ἐν τῇ ἡμετέρᾳ γενομένῃ παρεγενόμεθα—τῶν ἐς Ἰθώμην Εἱλώτων ἀποστάντων,*

Appendix D.

Selection of Papers used at the Sessional Examinations.

4. Describe the following localities:—Geræstus, Methymna, Nisæa, Colophon, Notium.

(B.)—Translate into Greek:—

For afterwards, even the whole of Greece, so to say, was convulsed; struggles being everywhere made by the popular leaders to call in the Athenians, by the oligarchical party, the Lacedæmonians. Now they would have had no pretext for calling them in, nor have been prepared to do so, in time of peace. But when pressed by war, and when an alliance also was maintained by both parties for the injury of their opponents and for their own gain therefrom, occasions of inviting them were easily supplied to such as wished to effect any revolution. And many dreadful things befell the cities through this sedition, which occur, and always will occur, as long as human nature is the same, but in a more violent or milder form, and varying in their phenomena, as the several variations of circumstances may in each case present themselves.

Translate:—

ÆSCHYLUS—*Agamemnon*, vv. 664–715.

τίς ποτ' ὠνόμαζεν ὧδ' ἐς τὸ πᾶν ἐτητύμως—
μή τις ὅντιν' οὐχ ὁρῶμεν προνοίαισι τοῦ πεπρωμένου
γλῶσσαν ἐν τύχᾳ νέμων;—
τὰν δορίγαμβρον ἀμφινεικῆ θ' Ἑλέναν; ἐπεὶ πρεπόντως
ἑλέναυς, ἕλανδρος, ἑλέπτολις,
ἐκ τῶν ἁβροπήνων
προκαλυμμάτων ἔπλευσε ζεφύρου γίγαντος αὔρᾳ,
πολύανδροί τε φεράσπιδες, κυναγοὶ κατ' ἴχνος
πλατᾶν ἄφαντον
κέλσαντες Σιμόεντος
ἀκτὰς ἐπ' ἀεξιφύλλους
δι' ἔριν αἱματόεσσαν.
Ἰλίῳ δὲ κῆδος ὀρθώνυμον τελεσσίφρων
μῆνις ἤλασεν, τραπέζας ἀτίμωσιν ὑστέρῳ χρόνῳ
καὶ ξυνεστίου Διὸς
πρασσομένα τὸ νυμφότιμον μέλος ἐκφάτως τίοντας
ὑμέναιον, ὃς τότ' ἐπέρρεπε
γαμβροῖσιν ἀείδειν.
μεταμανθάνουσα δ' ὕμνον Πριάμου πόλις γεραιὰ
πολύθρηνον μέγα που στένει κικλήσκουσα Πάριν
τὸν αἰνόλεκτρον,
παμπορθῆ, πολύθρηνον
αἰῶν' ἀμφὶ πολιτᾶν
μέλεον αἷμ' ἀνατλᾶσα.
ἔθρεψεν δὲ λέοντα
σίνιν δόμοις ἀγάλακτον
οὕτως ἀνὴρ φιλόμαστον,
ἐν βιότου προτελείοις
ἅμερον, εὐφιλόπαιδα,
καὶ γεραροῖς ἐπίχαρτον.
πολέα δ' ἔσχ' ἐν ἀγκάλαις
νεοτρόφου τέκνου δίκαν,
φαιδρωπὸς ποτὶ χεῖρα σαίνων τε γαστρὸς ἀνάγκαις.
χρονισθεὶς δ' ἀπέδειξεν
ἔθος τὸ πρὸς τοκέων·
χάριν γὰρ τροφεῦσιν ἀμείβων
μηλοφόνοισιν σὺν ἄταις
δαῖτ' ἀκέλευστος ἔτευξεν·
αἵματι δ' οἶκος ἐφύρθη·
ἄμαχον ἄλγος οἰκέταις,
μέγα σίνος πολυκτόνον.
ἐκ θεοῦ δ' ἱερεύς τις ἄτας δόμοις προσεθρέφθη.

Appendix D.

Selection of Papers used at the Sessional Examinations.

1. (*a.*) Supply the verb in the clause beginning *πολύανδροί τε φεράσπιδες κ.τ.λ.*, and translate with the readings *κελσάντων, πλάταν*. (*b.*) Point out the equivoque in *κῆδος*, and explain the construction of *ἀτίμωσιν* and *τίοντας*. (*c.*) Give the exact meaning and derivation of *γαμβρός*, and the different meanings that have been assigned to *ἀγάλακτος*. (*d.*) What is the literal meaning of *προτέλεια*? Explain the origin of the adverbial use of *δίκαν*. (*e.*) Give the various reading for *ἴσχ'*, v. 702. Translate the clause beginning *χάριν γὰρ τροφεῦσιν κ.τ.λ.* with the reading *χάριν τροφᾶς γὰρ ἀμείβων μηλοφόνοισιν ἄγαισιν κ.τ.λ.*

2. Translate into Greek Iambics:—

How sweet the moonlight sleeps upon this bank!
Here will we sit, and let the sounds of music
Creep in our ears; soft stillness, and the night,
Become the touches of sweet harmony.
Sit, Jessica. Look, how the floor of heaven
Is thick inlaid with patines of bright gold:
There's not the smallest orb, which thou behold'st,
But in his motion like an angel sings,
Still quiring to the young-eyed cherubims:
Such harmony is in immortal souls;
But whilst this muddy vesture of decay
Doth grossly close it in, we cannot hear it.

SHAKESPEARE.

SENIOR GREEK CLASS.

Translate:—

(A.)—EURIPIDES—*Iphigenia in Aulide*, vv. 334–357.

νοῦς δέ γ' οὐ βέβαιος ἄδικον κτῆμα κοὐ σαφὲς φίλοις.
βούλομαι δέ σ' ἐξελέγξαι, καὶ σὺ μήτ' ὀργῆς ὕπο
ἀποτρέπου τἀληθές, οὔτε κατατενῶ λίαν ἐγώ.
οἶσθ' ὅτ' ἐσπούδαζες ἄρχειν Δαναΐδαις πρὸς Ἴλιον,
τῷ δοκεῖν μὲν οὐχὶ χρῄζων, τῷ δὲ βούλεσθαι θέλων,
ὡς ταπεινὸς ἦσθα πᾶσι, δεξιᾶς προσθιγγάνων
καὶ θύρας ἔχων ἀκλῄστους τῷ θέλοντι δημοτῶν,
καὶ διδοὺς πρόσρησιν ἑξῆς πᾶσι, κεἰ μή τις θέλοι,
τοῖς τρόποις ζητῶν πρίασθαι τὸ φιλότιμον ἐκ μέσου;
κᾆτ' ἐπεὶ κατέσχες ἀρχάς, μεταβαλὼν ἄλλους τρόπους
τοῖς φίλοισιν οὐκέτ' ἦσθα τοῖς πρὶν ὡς πρόσθεν φίλος,
δυσπρόσιτος ἔσω τε κλῄθρων σπάνιος. ἄνδρα δ' οὐ χρεὼν
τὸν ἀγαθὸν πράσσοντα μεγάλα τοὺς τρόπους μεθιστάναι,
ἀλλὰ καὶ βέβαιον εἶναι τότε μάλιστα τοῖς φίλοις
ἡνίκ' ὠφελεῖν μάλιστα δυνατός ἐστιν εὐτυχῶν.
ταῦτα μέν σε πρῶτ' ἐπῆλθον, ἵνα σε πρῶθ' ὁρῶ κακόν.
ὡς δ' ἐς Αὖλιν ἦλθες αὖθις, χὠ Πανελλήνων στρατὸς

* * * * *

οὐρίας πομπῆς σπανίζων, Δαναΐδαι δ' ἀφιέναι
ναῦς διήγγελλον, μάτην δὲ μὴ πονεῖν ἐν Αὐλίδι,

* * * * *

κἀμὲ παρεκάλεις· τί δράσω; τίνα δὲ πόρον εὕρω πόθεν,
ὥστε μὴ στερέντας ἀρχῆς ἀπολέσαι καλὸν κλέος.

1. State accurately the laws of the metre of the extract, and notice any variations in the readings of the text.

2. (*a.*) Explain the constructions of the accusatives *τἀληθές*, v. 336; *ἄλλους*, v. 343; and *ταῦτα*, v. 349. (*b.*) Explain fully the force of the participles *εὐτυχῶν*, v. 348; and *σπανίζων*, v. 352; and state, generally, the distinction between the uses of the participle *with* and *without* the article.

(B.)—Translate into Greek Iambics:—

The quality of mercy is not strained;
It droppeth, as the gentle rain from heaven
Upon the place beneath: it is twice blessed;
It blesseth him that gives, and him that takes:

Appendix D.

Selection of Papers used at the Sessional Examinations.

'Tis mightiest in the mightiest; it becomes
The throned monarch better than his crown;
His sceptre shows the force of temporal power,
The attribute to awe and majesty,
Wherein doth sit the dread and fear of kings;
But mercy is above this sceptr'd sway,
It is enthroned in the hearts of kings;
It is an attribute to God himself;
And earthly power doth then show likest God's
When mercy tempers justice.

SHAKESPEARE.

JUNIOR GREEK CLASS.

Translate:—

(A.)—EURIPIDES—*Hippolytus*, vv. 267–283.

ΧΟΡΟΣ. γύναι γεραιά, βασιλίδος πιστὴ τροφὲ
Φαίδρας, ὁρῶ μὲν τάσδε δυστήνους τύχας,
ἄσημα δ' ἡμῖν ἥτις ἐστὶν ἡ νόσος·
σοῦ δ' ἂν πυθέσθαι καὶ κλύειν βουλοίμεθ' ἄν.
ΤΡΟΦΟΣ. οὐκ οἶδ' ἐλέγχουσ' οὐ γὰρ ἐννέπειν θέλει.
ΧΟ. οὐδ' ἥτις ἀρχὴ τῶνδε πημάτων ἔφυ;
ΤΡ. εἰς ταὐτὸν ἥκεις· πάντα γὰρ σιγᾷ τάδε.
ΧΟ. ὡς ἀσθενεῖ τε καὶ κατέξανται δέμας.
ΤΡ. πῶς δ' οὔ, τριταίαν οὖσ' ἄσιτος ἡμέραν;
ΧΟ. πότερον ὑπ' ἄτης ἢ θανεῖν πειρωμένη;
ΤΡ. θανεῖν· ἀσιτεῖ δ' εἰς ἀπόστασιν βίου.
ΧΟ. θαυμαστὸν εἶπας, εἰ τάδ' ἐξαρκεῖ πόσει.
ΤΡ. κρύπτει γὰρ ἥδε πῆμα κοὔ φησιν νοσεῖν.
ΧΟ. ὁ δ' εἰς πρόσωπον οὐ τεκμαίρεται βλέπων;
ΤΡ. ἔκδημος ὢν γὰρ τῆσδε τυγχάνει χθονός.
ΧΟ. σὺ δ' οὐκ ἀνάγκην προσφέρεις, πειρωμένη
νόσον πυθέσθαι τῆσδε καὶ πλάνον φρενῶν.

1. Write (*a*) the 1st fut. act., perf. act., and 1st aor. pass. of ὁράω. (*b*) the 2nd pers. imperat., the infinitive, and participle of οἶδα. (*c*) Explain fully the formation of κατέξανται.

2. Decline together, in the singular, the first two words in the extract.

Translate:—

(B.)—PLATO—*Apology*, c. 18.

Μὴ θορυβεῖτε, ὦ ἄνδρες Ἀθηναῖοι, ἀλλ' ἐμμείνατέ μοι οἷς ἐδεήθην ὑμῶν, μὴ θορυβεῖν ἐφ' οἷς ἂν λέγω, ἀλλ' ἀκούειν· καὶ γάρ, ὡς ἐγὼ οἶμαι, ὀνήσεσθε ἀκούοντες. μέλλω γὰρ οὖν ἄττα ὑμῖν ἐρεῖν καὶ ἄλλα, ἐφ' οἷς ἴσως βοήσεσθε. ἀλλὰ μηδαμῶς ποιεῖτε τοῦτο. εὖ γὰρ ἴστε, ἐὰν ἐμὲ ἀποκτείνητε τοιοῦτον ὄντα, οἷον ἐγὼ λέγω, οὐκ ἐμὲ μείζω βλάψετε ἢ ὑμᾶς αὐτούς. ἐμὲ μὲν γὰρ οὐδὲν ἂν βλάψειεν οὔτε Μέλητος οὔτε Ἄνυτος. οὐδὲ γὰρ ἂν δύναιτο· οὐ γὰρ οἴομαι θεμιτὸν εἶναι ἀμείνονι ἀνδρὶ ὑπὸ χείρονος βλάπτεσθαι. ἀποκτείνειε μέντ' ἂν ἴσως, ἢ ἐξελάσειεν, ἢ ἀτιμάσειεν. ἀλλὰ ταῦτα οὗτος μὲν ἴσως οἴεται καὶ ἄλλος τίς που μεγάλα κακά, ἐγὼ δ' οὐκ οἴομαι, ἀλλὰ πολὺ μᾶλλον ποιεῖν ἃ οὗτος νυνὶ ποιεῖ, ἄνδρα ἀδίκως ἐπιχειρεῖν ἀποκτιννύναι.

1. Parse *fully* (*a*) ἐδεήθην, (*b*) ὀνήσεσθε, (*c*) ἄττα, (*d*) ἐρεῖν, (*e*) ἴστε.

2. Explain *fully* the construction of οἷς ἐδεήθην ὑμῶν in the first sentence of the extract.

(C.)—Translate into Greek:—

1. He said that if you were to do this, you would do him the greatest service.
2. He went away, that he might not see the battle.
3. This boy has black eyes.
4. How much do you think that these dogs would fetch, if offered for sale?
5. When you have managed your own affairs well, you shall manage those of the state also.

JOHN RYALL, *Professor.*

THIRD YEAR'S AND SENIOR LATIN CLASSES.

Translate into elegiac verse:—

Whatever blooms in torrid tracts appear,
Whose bright succession decks the varied year;
Whatever sweets salute the northern sky
With vernal lives, that blossom but to die;
These here disporting own the kindred soil,
Nor ask luxuriance from the planter's toil;
While sea-born gales their gelid wings expand,
To winnow fragrance round the smiling land.

Translate into Latin prose:—

The time present seldom affords sufficient employment to the mind of man. Objects of pain or pleasure, love or admiration, do not lie thick enough together in life to keep the soul in constant action, and supply an immediate exercise to its faculties. In order, therefore, to remedy this defect, that the mind may not want business, but always have material for thinking, she is endowed with certain powers, that can recall what is past, and anticipate what is to come.

That wonderful faculty, which we call the memory, is perpetually looking back, when we have nothing present to entertain us.

JUNIOR LATIN CLASS.

Translate:—

LIVY, ii., 23.

Sed et bellum Volscum imminebat, et civitas secum ipsa discors intestino inter patres plebemque flagrabat odio, maxime propter nexos ob aes alienum. Fremebant se foris pro libertate et imperio dimicantes domi a civibus captos et oppressos esse, tutioremque in bello quam in pace, et inter hostes quam inter cives libertatem plebis esse: invidiamque eam sua sponte gliscentem insignis unius calamitas accendit. Magno natu quidam cum omnium malorum suorum insignibus se in forum proiecit. Obsita erat squalore vestis, foedior corporis habitus pallore ac macie perempti. Ad hoc promissa barba et capilli efferaverant speciem oris.

HORACE—*Epistles*, i., 3.

Quid mihi Celsus agit? monitus multumque monendus,
Privatas ut quaerat opes et tangere vitet
Scripta, Palatinus quaecunque recepit Apollo;
Ne, si forte suas repetitum venerit olim
Grex avium plumas, moveat cornicula risum
Furtivis nudata coloribus. Ipse quid audes?
Quae circumvolitas agilis thyma? non tibi parvum
Ingenium, non incultum est nec turpiter hirtum;
Seu linguam caussis acuis seu civica iura
Respondere paras seu condis amabile carmen,
Prima feres hederae victricis praemia. Quodsi
Frigida curarum fomenta relinquere posses,
Quo te coelestis sapientia duceret, ires.

1. Describe the situation of the Janiculum, Tusculum, Præneste, Baiæ, and Minturnæ.
2. Give some account of the following persons:—Aristippus, Camillus, Chrysippus, and Tibullus.
3. Derive the words *auspicium officium*, *subucula*, *hydropicus*, and *ampullor*.
4. When did Livy flourish? What parts of his history are extant?
5. What engines were used by the Romans in sieges?

Translate into Latin:—

It cannot be denied that Caius has had a prosperous voyage.
I cannot refrain from leaving the city.
No one is so good as not sometimes to sin.
There were some who left the city.
I am not ignorant that Caius has lost the opportunity.

Appendix D.

Selection of Papers used at the Sessional Examinations.

Who is ignorant, that there are three classes of Greeks?

The Germans were with difficulty restrained from hurling their darts against our men.

Translate into Latin elegiacs :—

Again a woman impelled the Trojans to wage fierce wars
In thy kingdom, just Latinus.

Was it not better to serve a hard tyrant,
And to groan in thy bull, cruel Perillus?

Often has it done good to attack enemies buried in sleep,
And to slay the defenceless crowd with armed hand.

SENIOR LATIN CLASS.

Translate :—

(A).—JUVENAL, v., 146–160.

Vilibus ancipites fungi ponentur amicis,
Boletus domino; sed quales Claudius edit
Ante illum uxoris, post quem nil amplius edit.
Virro sibi et reliquis Virronibus illa inbebit
Poma dari, quorum solo pascaris odore;
Qualia perpetuus Phaeacum autumnus habebat,
Credere quae possis subrepta sororibus Afris:
Tu scabie frueris mali, quod in aggere rodit,
Qui tegitur parma et galea metuensque flagelli
Discit ab hirsuta iaculum torquere capella.
Forsitan impensae Virronem parcere credas?
Hoc agit, ut doleas; nam quae comoedia, mimus
Quis melior plorante gula? ergo omnia fiunt,
Si nescis, ut per lacrimas effundere bilem
Cogaris pressoque diu stridere molari.

(B).—CICERO—*De Officiis*, i., 9.

Praetermittendae autem defensionis deserendique officii plures solent esse causae. Nam aut inimicitias aut laborem aut sumptus suscipere nolunt: aut etiam negligentia, pigritia, inertia aut suis studiis quibusdam occupationibusve sic impediuntur, ut eos, quos tutari debeant, desertos esse patiantur. Itaque videndum est ne non satis sit id, quod apud Platonem est in philosophos dictum, quod in veri investigatione versentur quodque ea, quae plerique vehementer expetant, de quibus inter se digladiari soleant, contemnant et pro nihilo putent, propterea iustos esse. Nam alterum iustitiae genus adsequuntur, in inferenda ne cui noceant iniuria, in alterum incidunt: discendi enim studio impediti quos tueri debent deserunt. Itaque eos ne ad rem publicam quidem accessuros putat nisi coactos.

1. Show that Juvenal's date may be approximately ascertained from his writings.
2. Criticise the text of the extract (A).
3. Give an outline of the Seventh Satire.
4. What division of the subject does Cicero make in his treatise *De Officiis?*
5. Name the Greek authors whom he followed in the composition of this work.

Translate into Latin :—

I don't see how past pleasures can assuage present evils. I confess that the judgment of the generality differs from my judgment. Laws punish the wicked, defend and protect the good. The opinion which you are implanting in my mind, Rutilius is rooting up. The opportunity which you are seizing, Caius has let slip.

Translate into Alcaics :—

O who despises the sacred admonition of places to be reverenced? who, O ancient mother of cities, hath unmoved passed by thee, lying-prostrate, with flying foot?

In vain, excited to madness by the avenging deity, the Persian conqueror hurled hostile destruction against thy walls and roofs set on fire, and

Burst through thy empty courts with barbarian foot: in vain the fierce soldier triumphing overthrew the sanctuaries and images of the gods with unpitying right-hand.

Appendix D.

Selection of Papers used at the Sessional Examinations.

THIRD YEAR'S LATIN CLASS.

Translate:—

LUCRETIUS, ii., 114–128.

Contemplator enim, cum solis lumina cumque
Inserti fundunt radii per opaca domorum:
Multa minuta modis multis per inane videbis
Corpora misceri, radiorum lumine in ipso,
Et velut aeterno certamine proelia pugnas
Edere turmatim certantia nec dare pausam,
Conciliis et discidiis exercita crebris;
Conicere ut possis ex hoc, primordia rerum
Quale sit in magno iactari semper inani.
Dumtaxat, rerum magnarum parva potest res
Exemplare dare et vestigia notitiai.
Hoc etiam magis haec animum te advertere par est
Corpora quae in solis radiis turbare videntur,
Quod tales turbae motus quoque materiai
Significant clandestinos caecosque subesse.

TACITUS—*Histories*, ii., 35, 36.

Othoniani in ripa turrim struxerant, saxaque et faces iaculabantur. Et erat insula amne medio, in quam gladiatores navibus molientes, Germani nando praelabebantur. Ac forte plures transgressos completis Liburnicis per promptissimos gladiatorum Macer adgreditur. Sed neque ea constantia gladiatoribus ad proelia quae militibus, nec perinde nutantes e navibus quam stabili gradu e ripa vulnera dirigebant. Et cum variis trepidantium inclinationibus mixti remiges propugnatoresque turbarentur, desilire in vada ultro Germani, retentare puppes, scandere foros aut comminus mergere. Quae cuncta in oculis utriusque exercitus quanto laetiora Vitellianis, tanto acrius Othoniani causam auctoremque cladis detestabantur. Et proelium quidem, abruptis quae supererant navibus, fuga diremptum: Macer *ad* exitium poscebatur. Iamque vulneratum eminus lancea strictis gladiis invaserant, cum intercursu tribunorum centurionumque protegitur. Nec multo post Vestricius Spurinna iussu Othonis, relicto Placentiae modico praesidio, cum cohortibus subvenit. Dein Flavium Sabinum consulem designatum Otho rectorem copiis misit quibus Macer praefuerat, laeto milite ad mutationem ducum, et ducibus ob crebras seditiones tam infestam militiam asperantibus.

1. Notice some differences between the versification of Lucretius and that of Virgil.
2. Quote or refer to some passages in ancient authors in which the poem of Lucretius is mentioned.
3. Give an account of his atomic theory.
4. What are the archaic forms of *dent*, *cui*, *imperator*, *notitiae*, and *posse?*
5. Trace the course of the Via Flaminia, Via Æmilia, and Via Postumia.
6. Sketch the biographies of Vespasian, Titus, Otho, and Vitellius.
7. Give examples of brevity of style from Tacitus.

B. LEWIS, *Professor.*

HISTORY.

A.—EUROPEAN.

1. Review the state of the Roman Empire in the age of the Antonines.
2. Compare the policy of Augustus with that of Diocletian. What important changes were introduced by the latter?
3. Sketch the character and career of Constantine. What changes did he make in the constitution of the Empire?
4. Narrate the leading events of the Gothic invasion in the time of the Emperor Valens. Describe the settlement of the Goths in Moesia, and the battle of Hadrianople.
5. Inquire whether the laws of the Barbarian states and the Feudal System may be traced to the manners and customs of the ancient Germans.

Appendix D.

Selection of Papers used at the Sessional Examinations.

B.—ENGLISH.

6. Discuss the consequences of the Norman Conquest of England.

7. In what respects did Anglo-Norman feudalism differ from that of the Continent?

8. What claim had Stephen to the throne of England?

9. Show that Magna Charta contained the leading principles of English liberty.

10. Trace the origin of Parliamentary Government in England.

11. What circumstances led to the Petition of Right? What were the principal provisions of that Act?

12. Review the events of the reign of Charles I. from the attempt to establish episcopacy in Scotland to the commencement of the Civil War.

13. Describe the battles of Marston Moor and Naseby.

14. Narrate the events in Cromwell's career from the Self-denying Ordinance to the execution of Charles I.

15. What was the Act of Uniformity, and when was it passed?

HISTORY—(*Honor Course*).

A.—HISTORY OF ENGLAND AND FRANCE.

1. What was the Feudal System? Explain the terms, *Relief, Aid, Escheat, Forfeiture, Wardship,* and *Marriage*.

2. Narrate the contest between Henry II. and Thomas à Becket.

3. Sketch the career of Louis IX., with particular reference to the part which he took in the Crusades.

4. Comment upon the manner in which English and French historians treat the battle of Bouvines.

5. Discuss the claim of Edward III. to the throne of France.

6. State the provisions of the Treaty of Bretigni. What difficulties arose in the negotiations consequent upon that treaty?

B.—HISTORY OF ENGLAND.

7. What was the Bill of Rights?

8. Describe the battle of the Boyne.

9. Mention the principal victories of Marlborough, with the dates.

10. Enumerate the leading articles in the Act of Union with Scotland. Narrate briefly the rebellions of 1715 and 1745.

ENGLISH LANGUAGE.

1. Give some account of the Roman invasion and occupation of Britain. What is understood by the Latin of the First Period?

2. State the facts and dates of the Anglo-Saxon invasion. Whence did the invaders come, and where did they settle?

3. What were the results of the Norman Conquest with regard to the language of the country?

4. Determine the use of French and English in the schools and in the courts of law during the period 1066–1400.

5. What was Layamon's "Brut"?

6. What was the "Ormulum"?

SHAKESPEARE'S "JULIUS CÆSAR."

7. Give the date of Cæsar's birth; of his first and second invasions of Britain; of his death.

8. Shakespeare represents Cæsar as having been killed in the Capitol; where was Cæsar actually slain?

9. Explain the diction of the following passages:—

(*a*.) Let not our looks *put on* our purposes.

(*b*.) Cæsar, I never *stood on ceremonies*,
Yet now they fright me.

(*c*.) Casca, be *sudden*, for we fear *prevention*.

(*d*.) And men are flesh and blood, and *apprehensive*.

(*e*.) Here thy hunters stand,
Signed in thy *spoil*, and crimsoned in thy *lethe*.

(*f.*) As rushing out of doors to be *resolved*,
If Brutus so unkindly knocked, or no.

10. Explain the following allusions:—

(*g.*) You all did see, that on the Lupercal
I thrice presented him a kingly crown,
Which he did thrice refuse.

(*h.*) You all do know this mantle; I remember
The first time ever Cæsar put it on;
'Twas on a summer's evening in his tent,
That day he overcame the Nervii.

(*k.*) And in his mantle, muffling up his face,
Even at the base of Pompey's statue,
Which all the while ran blood, great Cæsar fell.

(*l.*) For I can raise no money by vile means;
By Heaven, I had rather coin my heart,
And drop my blood for drachmas, than to wring
From the hard hands of peasants their vile trash,
By any indirection.

(*m.*) The last of all the Romans, fare thee well!

(*n.*) This was the noblest Roman of them all.

ENGLISH LITERATURE.

1. Sketch the plot of Chaucer's "Canterbury Tales."

2. Explain these passages; remarking any peculiarities of grammatical construction.

(*a.*) To serve halwes couthe in sondry londes.

(*b.*) Of fustian he wered a gipon,
Alle besmotred with his habergeon.

(*c.*) A monke there was a fayre for the maistrie.
Therefore he was a prickasoure a right.

(*d.*) For him was lever han at his beddes hed
A twenty bokes, clothed in black or red,
Of Aristotle and his philosophie,
Than robes riche, or fidel, or sautrie.

3. Comment upon this passage, with reference to the French spoken in England:—

And Frenche she spake ful fayre and fetisly
After the scole of Stratford atte bowe
For Frenche of Paris was to hire unknowe.

4. What was the "Mirror for Magistrates"? Who wrote the Induction?

5. What is the design of Spenser's "Faerie Queene"?

6. Explain the allusions in these extracts:—

(*e.*) By this the northerne wagoner had set
His sevenfold teme behind the stedfast starre
That was in ocean waves yet never wet,
But firme is fixt, and sendeth light from farre
To all that in the wide deepe wandring arre.

(*f.*) Now when the rosy-fingred Morning faire,
Weary of aged Tithones saffron hed,
Had spread her purple robe through deawy aire,
And the high hils Titan discovered;
The royall Virgin shooke off drousyhed.

(*g.*) Her angel's face,
As the great eye of heaven, shyned bright,
And made a sunshine in the shady place;
Did never mortal eye behold such heavenly grace.

7. Compare the dramatic influence of Shakespeare and Ben Jonson.

8. Sketch the dramatic career of Beaumont and Fletcher, with some account of their works.

Appendix D.

Selection of Papers used at the Sessional Examinations.

9. What is the design of Shakespeare's "Hamlet"? Review, briefly, the criticisms of Goethe, Schlegel, and Coleridge.

10. Explain the diction of these passages:—

(*k.*) So loving to my mother,
That he might not *beteem* the winds of heaven
Visit her face too roughly.

(*l.*) Perhaps, he loves you now;
And now no *soil*, nor *cautel*, doth *besmirch*
The virtue of his will.

(*m.*) They clepe us drunkards, and with swinish phrase
Soil our *addition.*

(*n.*) The dram of *eale*
Doth all the noble substance *of a doubt*
To *his* own scandal.

(*p.*) Unhouseled, disappointed, unaneled.

11. Characterize the prose style of Hooker, Bacon, Sir Thomas Browne, and Jeremy Taylor respectively.

12. Trace the correct school of poetry from Denham to Pope.

13. What is the design of Milton's "L'Allegro" and "Il Penseroso"?

14. Enumerate Dryden's controversial and satirical poems.

15. Write a life of Pope.

16. Mention those English poets who have been remarkable for excellence in prose composition.

EARLY ENGLISH—SPECIAL PRIZE.

1. Translate these passages from Ælfred's Translation of Orosius:—

(*a.*) þa fór he þa-gyt norđ-ryhte swa he mihte on þæm odrum þrim dagum geseglian; þa beah þæt land þær easto-ryhte, ođđo sio sæ in on þæt land, he nyste hwæþer; buton he wisto þæt ho þær bád westan windes, ođđe hwón norđan, and segledo þanon east be lande swa swa he mihte on feower dagum geseglian; þa sceolde ho þær bidan ryhte norđan windes, forđan þæt land þær beah sud-rihte, ođđe seo sæ in on þæt land, he nyste hwæþer.

(*b.*) Swidost he fór đyder, to eacan þæs landes seeawunge, for þæm hors-hwælum for þæm hi habhad swyđo æđele bán on hyra tođum. þa teđ hy brohton sume þæm cyninege; and hyra hýd biđ swiđe gód to scip-rápum. Se hwæl biđ micle læsse þonne ođre hwalas, ne biđ ho lengra þonne syfan elna lang. Ac on his ágnum lande is se betsta hwæl-huntađ; þa beođ eahta and feowertiges elna lange, and þa mæstan fiftiges elna lange; þara hé sæde þæt he syxa sum ofsloge syxtig on twám dagum. He wæs swiđo spedig man on þæm æhtum þe heora speda on beođ, þæt is on wildeorum [MS. wildrum]: he hæfde þa-gyt, þa he þone cyning sohte, tamra deora unbebohtra syx hund. Da deor hi hatađ hránas, þara wæron syx stæl-hránas; þa beođ swyđe dyre mid Finnum, forþæm hy fođ þa wildan hránas mid.

(*c.*) And þær is mid Estum đeaw þonne þær biđ man dead, þæt he liđ inne unforbærned, mid his magum and freondum, monađ, gehwilum twegen; and þa kyningas and þa ođre heahđungene men swa micle leng swa hi maran speda habbađ, hwilum healf geár þæt hi beođ unforbærned, and licgađ bufan eorđan on hyra husum. And ealle þa hwile þe þæt lic biđ inne, þær sceal beon gedrync and plega, ođ đone dæg þe hi hine forbærnađ.

2. Parse these words: *fór*, *mihte*, *beah*, *wiste*, *swidost*, *todum*, *brohton.*

3. Explain the phrases:—

(*a*) he nyste hwæþer.
(*b*) syxa sum.
(*c*) þe heora speda on beođ.

4. Analyse the following words:—*hors-hwælum*, *hwæl-huntad*, *stæl-hránas*, *unforbærned*, *heahdungene.*

5. Inquire whether modern English is a mixed language in Grammar as well as in Vocabulary.

6. Compare the relative proportion of French derivatives in Piers Ploughman and in Chaucer.

7. Explain the structure of Alliterative Verse.
8. Discuss those passages in Robert of Gloucester and Robert of Brunne, which bear upon the history of the English Language.

Selection of Papers used at the Sessional Examinations.

WILLIAM RUSHTON, *Professor.*

MODERN LANGUAGES.

Translate into French:—

I.

Of the animals who live with man many things are worthy of being known, and the dog and the horse are those which are most faithful. We read that a dog fought against robbers to save his master, and, although pierced with wounds, would not leave the dead body, and prevented the birds and the wild beasts from touching it. Another dog in Epirus recognised the murderer of his master in the midst of an assemblage of people, and forced him to confess his crime by biting and barking at him. Volcatius, a noble Roman, returning in the evening from the country, was attacked by a robber, and was saved by his dog. The Senator Coelius, also, while lying sick at Placentia, was attacked by armed men, and was not wounded until they had killed his dog.

PLINY—*Natural History.*

II.

The king (Frederick the Great of Prussia) now approached the end of his life, but his increasing infirmity did not prevent him from attending, with his usual diligence, to affairs of state. Before five o'clock in the morning he constantly gave audience to one of his secretaries and dictated letters on foreign concerns. Another secretary then entered, with whom he adjusted points of internal government. With a third minister he discussed military arrangements.

On one of these occasions the secretary fell dead at his feet in presenting a paper to him. The king, thus reminded of his own fate, did not seem shocked at the accident, but coolly ordered the body to be removed, sent for another secretary, and continued his labours.

When he had been thus employed for three hours, and had even answered letters received from the meanest of his subjects, he used to give instructions to the commandant of Potsdam and other officers. His health was the next object of consideration; and although he had no high opinion of medical aid, he daily consulted some eminent professors of the healing art. He then conversed with select friends in an easy and familiar manner. He dined alone; and after signing the letters and other papers which he dictated in the morning, re-enjoyed the pleasure of society. Before he retired to rest, the works of the ancients were read to him.

Such were his daily occupations during his last illness, even to the day which immediately preceded his death. While the tomb seemed ready to open for his feeble body, the strength and activity of his mind embraced every useful object, and allowed him still to perform the duties of a king.

RUSSELL—*Modern Europe.*

1. When is a noun preceded by the definite article in French, while it is not in English?
2. State the use of the imperfect and of the preterite in French, comparing it to the Latin, and illustrate it by examples.
3. Give the rules of the French grammar on the past participle, with examples.
4. What was the state of French literature at the death of Louis XIV.?
5. State what you know of the character and influence of Lafontaine's fables.
6. Characterize the genius of Molière; say which are considered his best plays.
7. Compare Molière's "Misanthrope" with the same subject treated by ancient and modern authors, and especially Shakespeare.
8. Characterize the genius of Racine; compare his "Phèdre" with the same subject treated by Euripides.
9. What are the earliest lasting monuments of the history of French literature?
10. What was the most brilliant epoch of French literature?

R. DE VERICOUR, *Professor.*

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LOGIC.

1. What defect is incident to the second operation of the mind? How far and by what processes does Logic remedy it?

2. What are Relative Nouns? What arguments can be based upon the connexion between them?

3. What is the distinction between Differentia and Proprium, and between Generic and Specific Differentia?

4. In what sorts of terms do Extension and Comprehension respectively reach their highest point, and why?

5. How does Accidental differ from Logical Definition?

6. How many kinds of Inference are there in Deductive Logic?

7. Why does Thompson limit Contradictory Opposition to E and I? Is he right in so doing?

8. What is his account of Subaltern Opposition?

9. Explain the various modes of Conversion.

10. Show that if one of the premises be negative the conclusion must be negative.

11. Special rules for the third figure, with proofs.

12. Construct a valid syllogism, by the help of Sir W. Hamilton's new kinds of propositions, which violates the special rules for the second figure, and reduce it to one of the ordinary modes.

13. What are Mill's objections to Induction by Points of Reasoning?

14. Give the canon of the Conjoint Method of Agreement and Difference. How far does it remedy the inherent weakness of the Method of Agreement?

15. What is meant by the Composition of Causes?

16. What is the distinction (if any) between cause and condition?

17. What are fallacies of Generalization? Give instances.

18. Define Dilemma. To what defects is it liable?

METAPHYSICS.

1. In what sense is Metaphysics to be regarded as an Inductive Science?

2. Explain the doctrine of Occasional Causes. How far was it the necessary result of the philosophy of Des Cartes?

3. Explain Hobbes' account of memory, and compare it with that of Sir W. Hamilton.

4. Is there any difficulty in proving the existence of other finite minds upon the principles of Berkeley?

5. Is Locke's system essentially sensational?

6. Was Locke's method faulty because he commenced with an inquiry into the *origin* of our ideas?

7. To what extent are Hume's principles borrowed from previous philosophical systems?

8. Examine his arguments to prove that the idea of cause and effect is not *à priori*.

9. How does Kant show that Space and Time are *à priori?*

10. Criticise Reid's account of the First Principles of Contingent Truths.

11. Is Sir W. Hamilton's theory of latent mental modifications reconcilable with the appeal to consciousness as explained by himself?

12. How far is Mill's Psychological Theory adequate to explain the Ego?

G. S. READ, *Professor.*

MATHEMATICS.—FIRST YEAR'S STUDENTS.

1. If K be any point in the side BC of the parallelogram ABCD, show that the sum of the areas of the triangles ABK, KCD, is constant.

2. Mention the most important properties of circles proved in the Third Book of Euclid.

3. If two straight lines intersect in a circle, the rectangles under the segments are equal?

4. Inscribe a pentagon in a given circle. Show that any regular polygon, the number of whose sides is given by 2^m 3. 5, can be inscribed in a circle by Euclid's method.

5. Define proportion geometrically, and show clearly from your definition that the areas and bases of triangles of the same altitude are proportional.

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6. Divide $x^{2n}-y^{2n}$ by x^2-y^2. Multiply the quotient by $x+y$, and show that the result is equal to

$$(x^n+y^n)\ (x^{n-1}+x^{n-2}y+x^{n-3}y^2+\ .\ .\ .\ +xy^{n-2}+y^{n-1})$$

7. Find the G.C.M. of 684 and 190, and the L.C.M.

Also find the G.C.M. of $x^4+6x^2-5x^3-4+2x$ and x^6-17x^3+16.

And the L.C.M. of $(x^2-4)^2\ (x-1)^3\ (2x+4)$ and $(x+2)^3\ (x-2)\ (2x-2)^2$.

8. What is the present value of a bill for £300, due six months hence, money being worth five per cent.?

9. Show that a quadratic equation has but two roots; and find the condition that $x^2+px+q=0$ may have one root positive and real and the other negative.

Solve the equations (1) $x^2-2x-3=0$.

(2) $(x-1)\ (x-2)\ (x-3)+1.2.3=0$.

(3) $x^{2n}+cx^n+b=0$.

10. Prove that $x^m\times x^n=x^{m+n}$ when m and n are positive integers.

How do you deduce that $x^{-m}=\frac{1}{x^m}$ and $x^{\frac{m}{n}}=\sqrt[n]{x^m}$?

Find the square root of $x^{-2}y^{\frac{5}{3}}z^{\frac{1}{2}}+2+x^2y^{-\frac{5}{3}}z^{-\frac{1}{2}}$.

11. If $a:b::c:d$, prove that $abcd$ is equal to the square of bc and

$$a^3-3a^2b+b^3:(a-b)^3::c^3-3c^2d+d^3:(c-d)^3.$$

12. Explain clearly what is meant by the circular measure of an angle,

A water-wheel, whose diameter is twelve feet, makes three revolutions per minute; find approximately the number of miles travelled per hour by a point on the circumference of the wheel.

13. Find an expression for all the angles having the same sine as α. Solve the equations, $\sin 2\theta=\sin\theta$ . . . . . (1).

$\tan\theta+\tan 2\theta=1-\tan\theta\tan 2\theta$ . . . . (2).

14. Prove that sin (A—B)=sin A cos B—cos A sin B, when A is an angle in the fourth quadrant, B an angle in the third quadrant, and (A—B) an angle in the first quadrant.

Show that $\frac{\sin 2\theta+\sin 3\theta}{\sin\theta+\sin 4\theta}=\frac{\cos\frac{\theta}{2}}{\cos\frac{3\theta}{2}}$.

15. If A, B, C be the angles of a triangle, prove that

$$\sin A+\sin B+\sin C=4\cos\frac{A}{2}\cos\frac{B}{2}\cos\frac{C}{2}$$

16. In any triangle prove that $c=a\cos B+b\cos A$. Show how to solve a triangle when two sides and the included angle are given.

SECOND YEAR'S STUDENTS.

(Prize Paper.)

1. ABC is an isosceles triangle; PA+PB+PC is a minimum when P is at the centre of the circumscribing circle. Prove this both by geometry, and by the differential calculus. Hence deduce, that if a regular polygon, ABC . . . . . of an odd number of sides be inscribed in a circle, the sum of PA+PB+PC+ . . . . . is least when P is centre of the circle.

2. Through a given point in a circle show how to draw, when possible, a chord so that the segments may be in a given ratio.

3. A man walks on a level plane so that two very distant towers on the same plane at A and B always appear equally high. He starts from a point C, lying between A and B, and in the line AB, where AC=a miles, and BC=b miles and $a>b$; show that when he again crosses the line AB he will have walked $\frac{\pi ab}{a-b}$ miles.

4. Sum the series—

(1) $\frac{2.3}{1}+\frac{3.4}{2}+\frac{4.5}{3}+$&c. to n terms,

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(2) $2^n - n.2^{n-2} + \frac{n(n-3)}{1.2}.2^{n-4} - \frac{n(n-4)(n-5)}{\underline{/3}}.2^{n-6} + \ldots.$

(3) $\tan^{-1}\frac{1}{1+x+x^2} + \tan^{-1}\frac{1}{1+3x+x^2} + \tan^{-1}\frac{1}{1+5x+x^2}$ + &c. to n terms.

5. If a_1, a_2, a_3 be the roots of the equation $x^3+px^2+qx+r=0$, find the equation whose roots b_1, b_2, b_3 are given by

$$b_1 = \frac{a_1}{a_2} + \frac{a_1}{a_3},\ b_2 = \frac{a_2}{a_1} + \frac{a_2}{a_3},\ b_3 = \frac{a_3}{a_1} + \frac{a_3}{a_2}$$

6. Show that the three radical axes of three circles intersect in a point. Find the condition that the radical axes of the circles

$$a(x^2+y^2)+bx+cy=0.$$
$$a'(x^2+y^2)+b'x+c'y=0.$$
$$a''(x^2+y^2)+b''x+c''y=0.$$

may be identical.

7. Find the equation to the ellipse referred to two conjugate diameters as axes. The tangent at a fixed point, P, of an ellipse is cut by two conjugate diameters in M and N; prove that the rectangle MP PN is constant.

8. Mention and illustrate with a figure the ordinary properties of a parabola. A focal chord to a parabola is bisected in V, and a line perpendicular to it through V meets the axis in G. Show that SG is half the length of the chord.

9. How would you define poles and polars with reference to any conic section? Mention all the properties you know them to possess.

10. Find the equation to the circumscribing circle of a triangle ABC in the form $\frac{a}{\alpha}+\frac{b}{\beta}+\frac{c}{\gamma}=0.$

Through A, the chord AP is drawn. Show that the lines BP, CP are given by the equations

$$\frac{\alpha}{a}+\frac{k\gamma}{b+kc}=0,$$
$$\frac{\alpha}{a}+\frac{\beta}{b+kc}=0,$$

when $B - k\gamma=0$, is the equation to AP.

11. Define a limit, and show that the limit of $\left(1+\frac{1}{x}\right)^x$ when x is indefinitely increased, lies between 2 and 3.

Find the limit of $\left(\frac{1-\cos\theta}{1-\cos 2\theta}\right).\sqrt[\theta]{1+2\theta}$ when θ is indefinitely increased.

12. Under what conditions is the following necessarily true? viz. :—

$$\frac{F(x+h)-F(x)}{\phi(x+h)-\phi(x)} = \frac{F'(x+\theta h)}{\phi'(x+\theta h)}.$$

Assuming the truth of this, prove Taylor's theorem.

In the expansion of $(\cos x)^{\sin x}$ in ascending powers of x, show that if a_n be the coefficient of x^n, then $a_0.a_{2n} - a_1.a_{2n-1} + a_2.a_{2n-2}$ — &c. $+\frac{1}{2}(-1)^n a_n^2 = 0$. Determine the values of a_0, a_1, a_2.

13. Show how to find the maxima and minima values of a function of of two independent variables. Find the maxima and minima values of x^2+y^2 where x and y are subject to the condition $\lambda x^2 \times \mu y^2=1$, distinguishing the maximum from the minimum.

14. Find the condition that the curve $y=\phi(x)$ may have n consecutive points in a straight line, and show that if n be odd the branches of the curve contiguous to these points lie on opposite sides of the line, but if n be even, on the same side.

15. Show that $\tan\phi = r\frac{d\theta}{dr}$ and $\frac{1}{p^2}=u^2+\left(\frac{du}{d\theta}\right)$. Find the equation to the equiangular spiral $p=r\sin\alpha$ in rectangular co-ordinates. Show that the evolute of an equiangular spiral is a similar curve.

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16. Integrate $\frac{1}{(a^2+x^2)^{\frac{1}{2}}}$, $\frac{1}{\sqrt{a-bx+cx^2}}$, $x\sqrt{\frac{a+x}{a-x}}$, $\frac{1}{\sqrt{1+a^x}}$, and make $\int x^{m-1}\,(a+bx^n)^p\;dx$ depend on $\int x^{m+n-1}.\,(a+bx^n)^p\;dx$ by a formula of reduction.

17. Give the general formula for finding the volume of a solid of revolution in polar co-ordinates.

Find by integration the volume included between a right cone circumscribing a sphere and the sphere, the angle of the cone and radius of sphere being given.

18. Differentiate the function $\int_a^b \phi\,(c,\,x).\;dx$ with respect to m, a, b, and c being functions of m.

Find form of $\phi\,(x)$ so that $\int_0^c \phi\,(x)\,\{c^n+x^n\}\;dx$ may be independent of C.

19. In a spherical triangle prove that

$$\tan\tfrac{1}{2}\,(\mathrm{A}-\mathrm{B})=\frac{\sin\frac{1}{2}\,(a-b)}{\sin\frac{1}{2}\,(a+b)}\cot\frac{\mathrm{C}}{2}.$$

If $b\quad c=\pi$, prove that $\sin 2\mathrm{B}\quad \sin 2\mathrm{C}=0$.

20. Find the area of a spherical triangle.

If $a=b$ and $c=\frac{\pi}{2}$, show that $\tan e=\frac{\sin^2 a}{2\cos a}$.

(*Pass Paper.*)

1. Show how to find the numerical value of π, and calculate it to five places of decimals.
2. Prove that e is incommensurable.
3. Find the equation to a straight line in the form $x\cos\alpha+y\sin\alpha=p$.
4. Interpret the following:—

$$x^2+y^2=0;\; x^2-y^2=0;\; a\,\theta+b\,\theta^2=c.$$

5. Find the equation of the tangent to the circle

$$x^2+y^2+ax+by=0.$$

at any point. What is the condition necessary that the axis of x may be a tangent at the origin?

6. Define a parabola, and find its equation in the form $y^2=4ax$.

Tangents at the extremity of a focal chord intersect at right angles in the directrix. Prove this.

7. In the hyperbola, prove that the difference of the squares on conjugate diameters is constant.

8. Define a differential coefficient, and *from your definition* prove that $\frac{d\sin x}{dx}=\cos x$. Differentiate $\epsilon^{\cos x}$, $\tan^{-1}(e^{x})$, $(1-x^2)^{\frac{1}{\sqrt{1-x^2}}}$.

9. Prove Leibnitz's theorem, viz:—

$\frac{d^n(yz)}{dx^n}=\frac{d^ny}{dx^n}.z+n\frac{d^{n-1}y}{dx^{n-1}}.\frac{dz}{dx}+$ &c., where y and z are functions of x. If $3x^2\frac{d^2y}{dx^2}-\frac{dy}{dx}=0$, show that $\frac{d^{n+2}y}{dx^{n+2}}=\frac{1-6nx}{3x^2}.\frac{dy^{n+1}}{dx^{n+1}}-\frac{n\,(n-1)}{x^2}\frac{d^ny}{dx^n}$.

10. Show how to find the maxima and minima values of $\phi\,(x)$. If ABC be an equilateral triangle, find the position of P, so that the sum of PA, PB, PC may be a minimum.

11. Under what conditions is the following necessarily true?

$$\frac{\mathrm{F}\,(x+h)-\mathrm{F}\,(x)}{\mathrm{F}\,(x+h)-\mathrm{F}\,(x)}=\frac{\mathrm{F}'\,(x+\theta h)}{f'\,(x+\theta h)}.$$

Assuming this, prove Taylor's theorem.

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12. Expand $\cos(1-x^2)$ and $\tan^{-1} x^2$ in ascending powers of x. Can $a^{\frac{1}{x}}$ be expanded in ascending powers of x? If not, why not?

13. Find the equation to the tangent to the curve $y = \cos\frac{\pi}{2}\epsilon^x$ at the origin. What is an asymptote to a curve?

14. Integrate $\cos nx$, $\frac{1}{\sqrt{1-x^2}}$, $\frac{1}{a\cos x+b\sin x}$, and find the whole area of the curve $a(x^2+y^2)+bx=c$ by the integral calculus.

ROBERT ROMER, M.A., *Professor.*

MIXED MATHEMATICS.

1. Prove the rule for the composition of couples in the same plane.

2. Four spheres, each eight inches in diameter, form a pyramid on a horizontal floor; find the distance of its centre of gravity from the floor.

3. A cubical box is half filled with water, and placed upon a rough inclined plane, so as to have the edges of its base parallel to those of the plane; if the plane be slowly inclined, find whether it will slide or topple over.

4. A body is projected in vacuo with a velocity of 50 feet per second, at an elevation of 15°; find its range, greatest altitude, and time of flight.

5. A weight of 8 ozs., hanging vertically, draws a weight of 12 ozs. by means of a string, along a smooth horizontal plane; find the space described by either body in the third second, also the tension of the string.

6. Two equal balls are suspended by equal and parallel strings, so as to rest in contact—one is drawn aside through an arc, whose chord is a, and allowed to fall and drive the other through an arc, whose chord is b; find the co-efficient of elasticity.

7. If the planets moved in concentric circular orbits round the sun, with forces varying inversely as square of the distances, prove the truth of Kepler's second and third laws.

8. A pencil of parallel rays falls on a convex spherical surface, bounding a dense medium; find the focus of the refracted pencil.

9. A ray of light enters a sphere, and emerges after two internal reflexions; find the condition of minimum dispersion.

10. Given the sun's meridian altitude and his midnight depression below the horizon; find the latitude of the place, and the sun's declination.

11. Find the lowest latitude at which twilight lasts all night.

12. From the observed right ascension and declination of a celestial object, *calculate* its latitude and longitude.

Prize Questions.

1. Weights W and $n\,W$ connected by a fine string move on two inclined planes, whose inclinations are α and α'; find the motion of the centre of gravity.

2. Find the centre of gravity of the area enclosed by the curve $r = a(1+\cos\theta)$.

3. Find the general equations of equilibrium of a flexible string acted on by any forces.

4. A particle is placed in a thin rectilinear tube, and is acted on by a force tending towards a fixed centre, and varying directly as the distance; find the time of an oscillation.

5. A particle is acted on by a central force, which varies inversely as the seventh power of the distance, and is projected from an apse with a velocity which is to the velocity in a circle at the same distance as $1:\sqrt{3}$; find the equation of curve described.

6. A semicular area is just immersed in a fluid, its diameter being horizontal; the density of the fluid varies as the depth; determine the centre of pressure.

7. A heavy body is let fall from a height (h), when it reaches the ground; prove that it is deviated towards the east, and find the amount of the deviation.

8. Prove that the equation of time vanishes four times a year.

9. Find how much the time of sunrise is advanced by refraction.

10. What is about the distance of a star whose annual parallax is 2″?

PRACTICAL MECHANICS.

Selection of Papers used at the Sessional Examinations.

1. The length of the barrel of a gun is *c* feet; a ball weighing *m* pounds leaves the muzzle with a velocity of *v* feet per second; find the mean pressure of the elastic vapour on the ball.

2. A body is projected with a given velocity *v* in a medium whose resistance varies as the square of the velocity; determine the distance through which it will move before being brought to rest—1st, if acted on by another force; 2nd, when also acted on by a constant force *f*.

3. The thread of the screw of a vice makes 4 turns to the inch; the handle is 6 inches long, and is urged by a pressure of 100 lbs.; find the pressure necessary to extract a piece of iron from the vice if the co-efficient of friction = ·5.

4. In an ordinary roof how would you calculate the strain on a tie-beam connecting the rafters—1st, when it joins their lower ends; 2nd, when connecting any other points in them?

5. A cylinder weighing 100 lbs. turns upon a horizontal axis; motion is communicated by a weight of 10 lbs. attached to a string, which is coiled round the surface of the cylinder; find the space through which the weight will descend in 10 seconds.

6. In what time would a steam-engine of 15 effective horse-power empty a shaft full of water, the diameter of the shaft being 8 feet, and 200 fathoms deep?

7. How many units of heat are necessary to evaporate 10 cubic feet of water at 62° Fahr. into steam, having the temperature of 250° Fahr.?

8. Prove the following formula for the horse-power of an engine, viz.

$$\text{h.p.} = \frac{144\, r\epsilon\mu p\, \text{S}}{33000}.$$

9. Show that the maximum useful effect is when P is a maximum.

10. How would you calculate the quantity of water necessary to condense a given quantity of steam?

NATURAL PHILOSOPHY.

JUNIOR DIVISION.

1. A straight lever, 4 feet long, has its shorter arm 1 foot 4 inches in length; what weight at the extremity of the shorter arm will balance 15 lbs. at the end of the longer—1st, neglecting the weight of the lever; 2nd, suppose it to weigh 6 lbs.?

2. What is meant by the moment of a force with regard to a point? and prove in the case of two parallel forces that their moments with regard to any point in their resultant are equal and opposite.

3. What is meant by the dynamical measure of a force, and illustrate your meaning by the example of gravity?

4. Two bodies are projected vertically upward with equal *forces;* one of them is twice the weight of the other; compare the heights to which they will ascend.

5. State the conditions of equilibrium of a solid body floating in a fluid.

6. What do you mean by the principal focus of a lens; how may it be experimentally determined?

7. When the eye is directed to an object, an inverted image of that object is formed on the retina; illustrate this by means of a figure.

8. What is meant by saying that the co-efficient of expansion of air is $\frac{1}{491}$? Describe some method by which this quantity can be determined.

9. How would you determine the magnetic axis of a bar magnet?

10. What limits are there to the charge of a Leyden jar?

11. Enumerate the chief sources of electricity.

12. What is the use of employing an astatic needle in the galvanometer?

SENIOR DIVISION.

1. Explain what is meant by the parallelogram of forces, and deduce from it the condition of equilibrium of three forces acting on the same point.

2. A regular hexagon is divided into two equal parts by a diagonal; determine the centre of gravity of either part.

3. From the principle that the *work done* by the moving power is equal to the *work done* by the resistance, deduce the condition of equilibrium in the screw.

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4. A plane which rises 1 foot in 10 is 100 yards in length; with what velocity should a body commence moving up it, so as to just reach the top?

5. A body is projected vertically upward with a given velocity; how would you determine the time at which it would reach a given altitude? Why does the question in general admit of two solutions?

6. A body moves in a circle of 50 yards radius with a velocity of 40 feet per second; calculate the centrifugal force. Explain the meaning of the result.

7. A plane surface is immersed in a fluid; what is meant by the *centre of pressure*; why is this point lower than the centre of gravity of the surface?

8. Describe the compound microscope.

9. Deduce the formula which connects the conjugate foci of a lens with its focal length.

10. From knowing the sun's meridian altitude and declination, find the latitude of the place of observation.

11. State in general the difference between the appearances of a superior and an inferior planet, both as regards their phases and apparent motions.

12. What is meant by the precession of the equinoxes?

Prize Questions.

1. A uniform rod rests with its extremities on two props; find at what point of its length a weight equal to its own weight must be suspended, in order that the pressures on the props should be as 2 : 1.

2. A bent lever consists of two uniform heavy rods, whose lengths are as 1 : 2; find the weight that must be attached to the shorter, in order that the arms may make equal angles with the horizon.

3. Three tacks are driven into a vertical wall, so as to form an equilateral triangle with its base horizontal; a string hangs over them, to each end of which a weight W is attached; find the pressure on each.

4. Find the relation between a very small increase of the length of a simple pendulum, and the corresponding decrease of the number of oscillations in a given time.

5. Two balls are projected vertically upwards from the same point with the same velocity *v*, the second being projected at the instant when the first attains $\frac{3}{4}$ of its greatest altitude; find the height at which they will meet.

6. Two *non-elastic* spheres moving in the same straight line impinge; find the velocity after impact.

7. Describe the method of determining the refractive index of any transparent substance.

8. Explain the method of determining *time* by an altitude of the sun.

9. In an eclipse of the moon, which does the obscuration commence on its eastern or western limb. In an eclipse of the sun does the shadow of the moon move eastward or westward on the earth's surface.

10. A star whose declination is known rises at the north-east point of the horizon; find the latitude of the place.

SENIOR DIVISION.

1. Describe some method of determining the expansion of mercury, that of the solid envelope in which it is contained being unknown.
2. State the laws of the formation of vapour in a space not occupied by air.
3. Describe Daniell's hygrometer, and state its defects.
4. What is meant by the "mobile equilibrium of temperature"?
5. How is the velocity of sound altered by the temperature of the air?
6. What is meant by the latent heat of steam? How is it measured?
7. What is meant by the *dip* of the magnetic needle? Give an outline of the law according to which it varies on moving north or south on the same meridian.
8. What are the conditions necessary for the development of thermo-currents?
9. State the law of induction of one current by another.
10. What is the cause of the residual charge in the Leyden jar?
11. Describe Smee's battery, and point out the direction of the current.
12. Describe Cuthbertson's balance electrometer.

Prize Questions.

1. The specific heat of a gas at a constant pressure differs from its specific heat at a constant volume. What is the physical cause of the difference?

Appendix B.
—
Selection of Papers used at the Sessional Examinations.

2. In a charged Leyden jar there is always an excess of electricity on that coating which has been connected with the machine. Why is this the case? And explain the relation which subsists between the excess and the total charge.

3. How is it proved by Coulomb's balance that magnetic attractions and repulsations vary inversely as the square of the distance?

4. Explain exactly the action of a current on the pole of a magnetic needle, and describe some experiments exemplifying it.

5. A circular current is suspended so as to move freely on a vertical axis. What action does the earth exert on it?

6. In the analysis of solar heat it is necessary to use a prism of rock salt. Why so?

7. Two thermometers, the bulb of one of which is blackened—that of the other covered with metallic leaf—are held at equal distances from the same source of heat. Describe the effects produced on each.

8. Describe Regnault's hygrometer. What advantages does it possess as compared with Daniell's?

PHYSICS.—THIRD YEAR'S STUDENTS.

1. State the sources of inaccuracy in Dulong and Petit's method of determining the expansion of mercury. How did Regnault modify this method?

2. If a vertical rod be fixed at one end, and extended by means of a force applied to the other, both its length and volume are altered; describe some experiments by which these alterations can be compared.

3. From knowing the capacity for heat of a gas at a constant pressure, and also its capacity in a constant volume, deduce the mechanical equivalent of heat.

4. Explain the principle of the Bifilar manetometer and its use.

5. How would you distinguish a plane from a circularly polarized ray?

6. How did Newton account for the colours of thin plates?

7. Prove, on the undulatory theory, that the index of refraction is the ratio of the velocities of light in the two media.

8. A current of electricity passes in succession through several conductors; by what means could you calculate the intensity from knowing the electromotive force and the resistance of each portion.

9. If a current pass simultaneously through several conductors, how would you calculate the intensity in each portion?

JOHN ENGLAND, *Professor.*

CHEMISTRY.—SPECIAL AND PRIZE EXAMINATION.

Pass Questions.

N.B.—The name and faculty of each student must be written on the first page of each book.

1. When chlorine is passed through a solution of ammonia in water, what gas is produced? Give its properties.

2. Give examples by formulæ of oxacids and hydracids.

3. What are monobasic and polybasic acids? Give examples.

4. What is meant by combination by weight and by volume? Illustrate both modes of combination in the case of ammonia.

5. How are carbonic acid and carbonic oxide converted into each other? Give the composition and the properties of each. State how carbonic acid, when present in considerable quantity in air, is detected.

6. Hydrogen gas is passed over sesquioxide of iron, heated to redness, and the vapours produced are then conducted through another tube filled with metallic iron, heated also to redness; explain the reaction in each case.

7. What is a salt? Give examples of haloid and oxysalts and of double salts.

8. Give an example of catalytic action.

9. Explain the law of isomorphism. Give examples of isomorphous salts.

10. What is the effect of nascent hydrogen on a solution of arsenious acid?

11. How is caustic potash prepared? Give the best test for this substance when in solution.

12. What are the general properties of the oxides of the metals of the alkalies and of the alkaline earths? How are the former separated from the latter in analysis?

13. How is nitrogen in organic substances estimated by conversion into ammonia?

Appendix D.
Selection of Papers used at the Sessional Examinations.

14. What is meant by the water type in the classification of chemical compounds? Write the formula of caustic potash (anhydrous) on the water type.

15. Explain the principles on which is based the estimation of C and H in organic substances.

Prize Questions.

N.B.—Prizemen are not required to answer the Pass Questions.

1. What is the difference between an empirical and a rational formula? Illustrate by examples.

2. How is nitric anhydride prepared? Give the general formulæ of the anhydrides.

3. Explain the doctrine of equivalents. Calculate how much hydrated nitric acid is required to decompose 100 grains of anhydrous carbonate of soda.

$N=14.$
$Na=23.$

4. A mixture of fluor spar silica and strong sulphuric acid are heated together, and the product passed into water; give the different reactions.

5. What is meant by the atomicity of the elements? Give examples of monatomic, diatomic, triatomic, and tetratomic elements, in combination and replacing each other.

6. How is carbonate of lead prepared as a pigment?

7. If iron, copper, and silver be in the same solution, how would you separate them? Give the best test for each.

8. Explain the American mode of extracting silver from its ores.

9. Twenty grains of the silver salt of an organic acid give on combustion 12·934 grains of metallic silver; what is the equivalent of the hydrated acid?

$Ag=108.$

10. What are homologous and heterologous series? Mention some of the compounds belonging to the latter series, and derived from ethylic alcohol. Give their formulæ according to the types on which they are formed.

11. What is the meaning of the condensed water type? Write the formula of sulphuric acid upon such a type.

12. How is common ether prepared? Give the theory of its formation, and write the formulæ of alcohol and ether on the water type.

J. Blyth, *Professor.*

Geology and Mineralogy.

1. What are the causes at the present time modifying the earth's crust, and what are their results?

2. What are the features which mark sedimentary rocks, and into what lithological groups are these rocks divided?

3. What is the nature and composition of Doleritic rocks?

4. Under what circumstances do Metamorphic rocks occur, and what is the nature and composition of those rocks?

5. Name some of the fossils found in the lowest portion of the Silurian rocks.

6. What is the position of the Upper Llandovery rocks, and what fossils characterize their strata?

7. In what formation in the British Isles does rock-salt occur, and what are the strata usually associated with it?

8. What products of commercial value are obtained from the Lias?

9. What are the members of the Eocene deposits of the valley of the Thames which are absent from the Paris basin?

10. What are the circumstances which have induced geologists to infer that an Arctic climate prevailed during the Pleistocene epoch?

11. Describe the external characters of Calc-spar.

12. By what simple means can Iron pyrites and Copper pyrites be distinguished from each other?

13. What are the characters which distinguish Talc from Mica?

14. In what rocks is Hornblend usually a constituent mineral?

Robert Harkness, *Professor.*

ZOOLOGY AND BOTANY.

Appendix D.

Selection of Papers used at the Sessional Examinations.

1. What vertebrate animals are without limbs?
2. What vertebrate animals are without teeth?
3. What hoofed mammals are peculiar to southern and tropical America?
4. Indicate, as succinctly as possible, the most general characters of the class Crustacea.
5. Compare the Nudibranchiata of Cuvier with (*a*) Heteropoda and (*b*) ordinary Gasteropoda.

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6. Mention some apetalous plants not usually referred to the group of Monochlamyds.
7. To what British Order of Phænogams would the subjoined diagnosis apply:—*Corolla* gamopetalous, regular, hypogynous; *stamens* isomerous, epipetalous and opposite the corolla-lobes; *placenta* free central?
8. Describe the mode of growth of the root in flowering plants.
9. Give examples of plants with (*a*) whorled, (*b*) peltate, (*c*) palmately-veined, and (*d*) fasciculate leaves.
10. What peculiarities distinguish the fruit of the Cruciferæ? Of what parts is it formed, and how are its seeds arranged?

J. REAY GREENE, *Professor.*

SURVEYING, LEVELLING AND MENSURATION.

1. In passing from one chain line to the next, how would you arrange your offsets, and what would be your object in the arrangement?
2. How would you set off a perpendicular with the chain only?
3. Explain the method of getting past an obstacle in chaining a line by the method of the transversal of a triangle, and prove the formula to be employed in calculating the required distance.
4. What is meant by repeating when measuring angles with the theodolite? Mention some occasions on which you might require to employ this method.
5. Describe the planimeter.
6. Describe the eidograph and its graduation. If a map was to be enlarged in the proportion of 5 to 3 how would you set it?
7. Describe the method of setting out a curve with the theodolite and chain.
8. What are the *odd* distances? How do you set out the points of the curve corresponding to them?
9. Width of formation level, 30 feet.
   Depth of cutting at centre, 2 feet.
   Sidelong slope of ground, 1 in 4.
   Slopes, 1½ to 1.
   Calculate area of cross section of cutting and embankment.
10. Prove the ordinary form of the prismoidal formula, as applicable to railway cuttings, in ground level in cross section.

CIVIL ENGINEERING.

1. What do you mean by the set of iron when a load has been applied to it and removed? State what you know of the phenomena presented by wrought-iron when tensile strains, gradually increasing up to the breaking strains, are applied and removed.
2. In Hodgkinson's formula for the strength of cast-iron pillars, how were the values of the indices of the length and diameter determined?
3. A flanged girder is 50 feet long and 4 feet deep, and supports a uniformly distributed load of 32 tons; what is the strain in either flange at 9 feet from the end, neglecting the web, and assuming the strain throughout the cross section of the flange to be constant.
4. Prove the following formulæ for flanged girders:—

$$M=\frac{f}{c}\left\{\left(a_1+\frac{a_3}{3}\right)h_1^2+\left(a_2+\frac{a_4}{3}\right)h_2^2\right\}.$$

5. In a Warren girder, if a weight *w* is placed on an apex dividing the girder into *m* and *n* bays, show that the strain in any diagonal will be either

$$\frac{m}{l}\,w\sec\theta;\ \text{or}\ \frac{n}{l}\,w\sec\theta.$$

Appendix D.

Selection of Papers used at the Sessional Examinations.

6. Discuss the nature of the strains produced in any diagonal of a Warren girder by a load rolling on and off the girder.

7. Find the deflection of a semi-girder loaded at the extremity.

8. What is concrete? Describe some of the methods of mixing it mechanically.

9. Write the specification for the brickwork in a bridge to carry a public road over a railway.

10. What are the principal ores from which cast-iron is obtained? Give some account of smelting any one of them.

1. What is meant by *ruling gradients* on a line of railway? What limits are generally adopted for them under different circumstances?

2. Describe some of the remarkable examples of steep gradients and the method of working them.

3. Describe some of the ordinary systems of permanent way: 1st, when wooden sleepers are employed; 2nd, when iron sleepers are employed.

4. Describe the form of the boiler, fire-box shell, and fire-box in a locomotive.

5. Explain the action of the link motion.

6. Describe the construction of an ordinary cofferdam in 5 feet of water at low tide with a rise of tide of 10 feet.

7. Describe the construction of a Warren girder.

8. Describe some of the different constructions adopted for cast iron arches in large and small spans.

9. Give the ordinary formula for the discharge of water from a *small* orifice at a considerable depth.

10. Give the ordinary formula for the flow of water through a pipe or channel. Give what reasons you can for the adoption of this formula and state how far it is empirical.

11. What is meant by degrees of hardness of water? What is considered to be a sufficient supply of water to a town per head of the population?

GEOMETRICAL DRAWING.

1. If two right lines be parallel, and one of them be perpendicular to a plane the other shall be also perpendicular to the same plane?

2. Give a method for describing the Scotia curve.

3. Describe the Roman Doric order.

4. Given the traces of three planes; find the projection of their intersection.

5. Given the projections of a line and the traces of a plane; find the projections of their point of intersection.

6. Given the projections of a right circular cone, with its axis vertical; find the projections of the section of it made by a plane perpendicular to the vertical plane of projection, and parallel to one side of the cone.

7. Construct the real size of the section.

8. Given the projections of a line; find the shadow cast by the line on planes coincident with the two planes of projection when the shadow falls partly on each.

9. Prove the ordinary method of constructing relative natural and isometric scales.

10. If a horizontal line make an angle of 30 degrees with the picture plane and the distance of the picture be 15 inches, where will the vanishing point be, and how many inches from the centre of the picture?

11. Construct the development of the intrados of an oblique arch.

12. Give a construction in the picture plane for the vanishing point of a line lying in a vertical plane, making an angle θ with the picture plane, the line itself making an angle ϕ with the trace of the plane in which it lies.

13. Find the projection of the shadow cast by the edge of the abacus in the Tuscan order on the ovolo moulding below it.

14. Give and prove the expression for the tan of angle of skewback of extrado in a segmental oblique bridge.

ALEXANDER JACK, *Professor.*

FACULTY OF MEDICINE.

MATERIA MEDICA AND THERAPEUTICS.

Pass Questions.

1. TARTAR EMETIC.—Its chemical composition, characteristics, and tests: physiological action; therapeutical applications; doses and modes of administration.

2. CASTOR OIL.—Latin name; natural family of plant; active ingredient; physiological action; doses and modes of administration.

3. ALOES.—Physiological action; therapeutical uses; advantages and disadvantages; dose and administration.

4. Give the doses of—laudanum; tincture of aconite; liquor arsenicalis; croton oil; tincture of digitatis.

5. Describe the chemical reactions in the preparation of calomel; iodide of potassium; acetate of potash.

Prize Questions.

6. In what special cases of glandular disease does iodine exercise an absorbent action?

7. Describe the reactions which take place in applying the Prussian blue test for hydrocyanic acid.

8. How is the reaction of sesquichloride of iron with meconic acid distinguished from that with sulphyocyanides and acetates?

9. Enumerate the chief acrid cathartics, stating the essential distinguishing characteristics of each.

10. How do diuretics act? and what will guide you in the choice of the special one selected?

11. Give a general outline of the action and uses of emetics, classifying them according to the indications for their use.

N.B.—Questions to be answered *in order of sequence; and for prizes, pass questions first.*

PURCELL O'LEARY, *Professor.*

PRACTICAL ANATOMY.

1. Mention the connexions and processes of the sphenoid bone.

2. Describe the articular surfaces and ligaments connecting the ribs with the vertebral column.

3. Mention the insertions of the tendons of the following muscles, viz.—Peroneus longus, brevis, tertius, tibialis anticus and posticus.

4. Describe the recti capitis antici majores and minores muscles.

5. Describe the saphenous opening in the fascia lata; also the attachments of the iliac and pubic portions of that membrane.

6. Describe the origin, course, and termination of the posterior saphena vein.

7. Describe the origin, course, and relations of the arteria profunda femoris; then name the branches.

8. State the origin, course, and relations of the great sciatic nerve.

9. Describe the origin, course, branches, and inosculations of the subscapular artery.

ANATOMY AND PHYSIOLOGY.

1. What are the chemical components of the red corpuscles of the blood?

2. What is the composition of the serum of the blood.

3. What are the structures entering into the coats of an artery, and how are they disposed?

4. What are the textural arrangements in the lymphatic glands, and what are the relations of the lymphatic vessels with respect to these bodies?

5. What are the connexions of the crystalline lens?

6. What are the connexions of the iris, and what are the structures which compose it?

7. What are the connexions and relations of the ciliary processes?

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Selection of Papers used at the Sessional Examinations.

8. What is the average per-centage of carbonic acid in expired air, and what are the circumstances which affect its rate of production?

9. State the constituents of the urine and nature of urea; also state average quantity of urea and uric acid eliminated in twenty-four hours.

10. State the nature and composition of lymph and chyle.

J. H. Corbett, *Professor.*

Midwifery.

1. Describe those abnormal conditions of the pelvis in which obstruction is offered to the passage of the child's head during labour, at the brim, in the cavity, and at the outlet, respectively.

2. Describe the mucous membrane of the uterus as observed in the unimpregnated organ at ordinary times, during menstruation, and immediately after delivery.

3. What is a Graafian vesicle? Describe its structure and mode of connexion with the ovary; its progress towards maturation; and the ultimate changes which it undergoes.

4. Describe minutely the areola and nipple of a pregnant woman. What is the value of the former as a means of diagnosing the existence of pregnancy? When are its indications least to be trusted?

5. What is understood by extra-uterine fœtation? Enumerate the principal forms under which it occurs, with the usual terminations of each.

6. Give a descriptive detail of the physiological actions which are brought into play in the processes of the dilatation of the mouth of the uterus, and of the expulsion of its contents, in a natural labour.

7. What are the early positions of the head in the pelvis which eventuate in the child being born with its face to the pubis? What effect has this state of things on the progress of the labour?

8. What is understood by arrest; and what by impaction? State what steps you would take in case of either of these having taken place. Describe the operation you would have recourse to in each case.

9. State how you would manage a case of placenta prævia in which the placenta only reaches the edge of the os uteri; and also when it is central, or nearly so. What constitutional treatment would you adopt in both cases?

10. Detail the symptoms, both actual and premonitory, the pathology, and the treatment of puerperal eclampsia or convulsions.

J. (R.) Harvey, a.b., m.d., *Professor.*

Surgery.

1. Describe the changes produced by inflammation in the local circulation.

2. What are the symptoms of chronic inflammation of the tonsils: how is the disease produced; the varieties, structure, and the different methods of treatment?

3. Enumerate the varieties of talipes, their pathological anatomy, and the different kinds of treatment for each.

4. What are the different forms of hare-lip—the complications, treatment, and operations suited for each?

5. Detail the symptoms of strangulated inguinal hernia, the treatment, and operations.

6. How would you treat an oblique fracture in the middle of the thigh bone, with a tendency to displacement; and how is the reparation of fractures accomplished?

7. Detail the different forms of cancer and their treatment, and the signs which indicate and contra-indicate their removal by operation.

8. What are the dislocations of the shoulder joint, and the different methods of reduction for each, and when and how accomplished?

9. Describe the different methods of amputation, and the cases suited for each.

SURGERY.

Selection of Papers used at the Sessional Examinations.

1. Describe what is meant by ulceration, and what by gangrene, and how the two processes differ, the one from the other.

2. What is understood by the term scrofula; what is the character of tubercle; what are its different forms and treatment?

3. What are the different fractures of the thigh bone; what the various methods of treatment and cases requiring amputation?

4. Describe the several kinds of stricture of the male urethra, their anatomical classification, and locality, and treatment.

5. What are the different forms of titis, the symptoms common to each; how can they be distinguished, the one from the other; and their treatment?

6. What are the modes by which arterial canals are narrowed and obliterated by atheroma?

7. Describe the symptoms, progress, and treatment of the phosphorous disease.

8. What is the classification of hæmorrhoids of the rectum, their pathology, and treatment?

W. K. TANNER, *Professor.*

PHYSIC.

1. What are the chief symptoms of variola, and the causes of death when it arises in this disease?

2. What are the chief sources of danger in intermittent fever? Give an explanation of the manner of their occurrence.

3. What are the leading symptoms of diphtheria, and in what does its chief danger consist?

4. What are the different forms of diarrhœa, and the exciting cause in each case?

5. Explain the symptoms and pathology of tabes mesenterica.

6. State the varieties of carcinoma, and its mode of propagation through the system.

7. What are the means adopted by nature to remove tuberculous matter deposited in any organ?

8. What is the essential cause of apoplexy, and what are the exciting causes?

9. What various changes in the circulatory apparatus are produced by constriction of the aortic valve and the modus operandi of these changes.

D. C. O'CONNOR, M.D., *Professor.*

MEDICAL JURISPRUDENCE.

1. What mode of examination is to be followed in the case of red stains on cloth, suspected to be blood? Can the blood of men be distinguished from that of other mammals?

2. Describe the chief signs from which an opinion may be formed that a child has arrived at maturity at the time of its birth.

3. How soon may death take place after submersion in water? What is the mode of treatment in cases of drowning?

4. Mention some articles of food which have occasionally given rise to symptoms resembling poison. Describe the symptoms which are usually produced.

5. What are the symptoms and the *post-mortem* appearances to which narcotics give rise?

6. Describe the process for the detection of morphia in the contents of the stomach.

J. BLYTH, M.D., *Professor.*

MEDICAL JURISPRUDENCE.

Selection of Papers used at the Sessional Examinations.

1. Distinguish between the manner in which the examination of a witness should be conducted on the direct from the cross-examination, and state the reason of the rule.

2. What must a witness have done to entitle him to refresh his memory while under examination, by reference to written documents?

3. Has a medical witness any privilege protecting him from the disclosure, in a court of law, of statements confidentially communicated to him by a patient? Refer to the authority of a leading case in which this question was decided.

4. Distinguish the legal meaning of "a wound," "a maim," "a grievous bodily harm," and "a disabling," respectively.

5. Upon a charge of infanticide what constitute the "corpus delicti."

6. Upon a charge of murder by poison, is it essential that the specific kind of poison used must be proved?

7. In order to obtain an acquittal on the ground of insanity, what must be proved?

8. What is necessary for the valid execution of a will; and what may be regarded as one of the best tests of the existence of a capacity to make a will?

MICHAEL BARRY, *Professor.*

FACULTY OF LAW.

REAL PROPERTY AND CONVEYANCING.—FIRST YEAR STUDENTS.

1. What words are necessary to create an estate in fee, where land is granted by deed?

2. Land is granted by deed to A, and his heirs male, who dies leaving one daughter? What is the effect of such a limitation, and what estate does it create?

3. An estate is granted to A for life, with remainder to B and the eldest son of C (C having no son born at the time of the grant), what kind of estate in remainder will B and the after-born son of C take? Will they take the estate in remainder as joint tenants or not? Give the reason for the answer.

4. What is the word in a lease technically called by conveyancers the operative word?

5. What are covenants? State the distinction between those which run with the land and those that do not.

6. What is the deed proper for transferring the share of one joint tenant of land to his co-tenant?

7. A seized in fee bargains and sells for money land to B for a year; must B enter on the land in order to acquire the legal estate?

8. For what purpose is a subscribing witness to a deed necessary?

9. Give an instance of a title by act of law.

10. How many are the canons of descent? What is the third?

11. What were the requisites prescribed by the Statute of Frauds to validate a devise of freehold property? What are the requisites at present of a valid will?

12. For what period of time must title to land be traced back? What reason is assigned by Williams for the particular number of years required?

EQUITY.—SECOND YEAR STUDENTS.

1. Explain the distinction between equitable estates and interests created by way of trust executed, from those created by way of trust executory.

2. State the general maxim of equity on the principle of which a Court of Equity refuses to interfere against a *bona fide* purchaser for valuable consideration without notice of an adverse title.

3. In equity, from the time of a contract for the sale of land, the vendor is regarded a trustee as to the land for the purchaser, and the purchaser a trustee

Appendix D.

Selection of Papers used at the Sessional Examinations.

as to the purchase money for the vendor—upon what principle in Equity is this relation founded?

4. Under what circumstances will real property become liable to legacy duty?

5. State the order of administration of different properties in payment of debts, and distinguish the manner in which legal and Equitable assets are applied.

6. In what cases will a Court of Equity refuse an immediate injunction to restrain the infringement of a patent?

7. In what cases will the writ "*ne exeat regno*" be granted by a Court of Equity?

8. For what purpose will a Court of Equity appoint a receiver, and what is the nature of his office and duties?

9. Out of what property will a Court of Equity enforce a settlement by a husband of a proportion on his wife?

THIRD YEAR STUDENTS.

1. State the ground on which Equity will not refuse relief to a *particeps criminis.* Hatch *v.* Hatch, 9th Vesy, jun., 292.

2. What was decided in the case of Hugeuvin *v.* Basley (14, Vesy, jun., 273)? Upon what principle of Equity did Sir Samuel Romilly, in his argument in that case, rest the right of the plaintiff to relief?

3. What were the rules which governed the liability of a purchaser to look to the application of the purchase money (Elliot *v.* Merryman, Leading Cases, 48) previously to the enactment of the 22nd and 23rd Vict., chap. 35, and sec. 23.

4. What constitutes an infant a ward in chancery.

5. State the maxim of Equity on which relief by a decree for specific performance is grounded.

PERSONAL PROPERTY.

1. Has the finder of goods any kind of property in them.

2. Has the doctrine of perpetuity any, and what application to personal estate.

3. If a chattel personal be given to A and the heirs of his body, what estate therein has A? Explain the principle on which this depends.

4. What are the provisions of the statute of frauds, as explained by the 9 Geo. IV., chap. 14, upon the sale of goods to the value of £10 or upwards.

5. What is the technical description of a promise by deed. To what class of contracts does it belong?

6. How may the right of a "stoppage *in transitu*" be defeated?

7. What is a lien. Explain the difference between a general and a particular lien.

8. What is the difference between a general and a special endorsement of a bill of Exchange?

MICHAEL BARRY, *Professor.*

[APPENDIX E.

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Appendix E.

Table giving List of Classes, No. of Lectures, and No. of Students attending same.

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Table giving List of Classes and Number of Lectures, and of Number of Students attending same.

	No. of Lectures Weekly.	No. of Lectures.	No. of Students.
Greek,	10	233	45
Latin,	9	204	42
English Literature,	3	65	9
,, Language,	3	40	27
History,	3	54	2
Do. Honor,	3	47	2
French,	9	225	72
Mathematics,	9	200	50
Chemistry,	3	70	53
Practical Chemistry,	7	45	29
Natural Philosophy,	14	291	62
Natural History,	3	68	30
Political Economy,	4	24	5
Geology and Mineralogy,	3	74	21
Logic,	3	39	13
Metaphysics,	3	63	4
Engineering,	12	253	39
Anatomy and Physiology,	5	105	70
Practical Anatomy,	5	102	68
Surgery,	3	65	35
Midwifery,	3	65	37
Medicine,	3	60	28
Materia Medica,	3	59	29
Medical Jurisprudence,	4	36	23
English Law,	9	72	7
Civil Law,	6	48	5

Appendix F.

Form of Circular from President, and special Reports from Professors.

APPENDIX F.

Form of Circular from President, and Special Reports from Professors.

Return to be filled up by the Professor of Materia Medica, and to be returned to the Registrar, so filled up, for the official information of the President, on or before the————, being for the Collegiate Session 1866—67.

A.—As to the course or courses of lectures given by the Professor. 1st. Duration and extent of the course; number of terms. 2nd. Number of weeks of lectures in each term. 3rd. Number of lectures weekly, and days and hours of lectures.

B.—The description or title of the course or courses of lectures delivered, and a general abstract of the subjects of instruction contained in the course, and the title of the text-books recommended.

C.—Whether the lectures are illustrated by reference to maps, diagrams, specimens, or experiments; and a general notice of the kind of illustrations used.

D.—Whether any method of tutorial, or other special instruction, is employed, as by setting out portions of text-books for lessons, by themes, or exercises in composition, or problems; and whether special class examinations are held, and at what time; or whether herborization excursions, or field exercises, are given.

E.—What faculties or division of students are those attending courses of lectures of the professors making the return.

F.—The number of students attending each course—distinguishing matriculated and non-matriculated students; and the general regularity of attendance.

G.—The general conduct of students at the Professor's lectures; and the general state of discipline as regards the Professor's classes.

H.—The general condition of the department of which the Professor has charge, as to supplies, fitments, cleanliness, and accommodation, for the purposes of instruction.

Appendix F.

Form of Circular from the President, and Reports from Professors.

The Professor, in making the above returns, is requested to mark the answers with the letter designating the portion of the form of return, as above, to which each answer refers.

Signed, by order of the President,

R. J. KENNY, *Registrar.*

REPORT of PROFESSOR of GREEK.

A.—1. The course of lectures extended over three terms. 2. The first term contained 9 weeks; the second, 13 weeks; and the third, 5 weeks. There were 10 lectures delivered in each week, viz., between the hours of 9 and 11 o'clock, A.M., on every day except Saturday.

B.—The course of the Greek language and literature.

C.—There are maps for reference on the walls of the lecture-room.

D.—Portions of authors were prepared in the intervals between the lectures, which the students were examined. Exercises in prose and verse composition, according to their proficiency, were required.

E.—By students of the Faculty of Arts exclusively.

F.—Forty-seven matriculated students. The attendance was, in the case of the great majority of the students, very regular.

G.—The general conduct of the students was very satisfactory, and the discipline good.

H.—Satisfactory.

JOHN RYALL, *Professor of Greek.*

REPORT of the PROFESSOR of LATIN.

A.—The course extended through three terms. First term, 8 weeks; second term, 12 weeks; third term, 3 weeks. Junior class, 4 lectures weekly; senior class, 3 lectures weekly; extra and third year's class, 2 lectures weekly.

B.—The Latin language. Text-books of lectures:—Junior class: Livy, part of Book II.; Horace—Epistles, part of Book I. Senior class: Juvenal—Satires, V., VII., and VIII.; Cicero—De Officiis, part of Book I. Extra and third years' class: Lucretius, part of Book II.; Tacitus—Histories, Book II., chapters 1–44.

C.—The lectures were illustrated by references to the art collections belonging to the college.

D.—The students prepared a portion of the text-book for each lecture; they also wrote Latin exercises in prose and verse.

E.—Students in Arts.

F.—Forty-two, all matriculated.

G.—Satisfactory with few exceptions.

H.—Satisfactory.

B. LEWIS.

REPORT of the PROFESSOR of HISTORY and ENGLISH LITERATURE.

A.—1. Two terms, History and English Literature; one term, English Language. 2. History—first term, 8 weeks; second term, 10 weeks: honor course—first term, 6 weeks; second term, 9 weeks. English Literature—first term, 8 weeks; second term, 9 weeks: extra—first term, 8 weeks; second term, 13 weeks: early English—first term, 5 weeks; second term, 6 weeks. English language—second term, 13 weeks. 3. History—3 lectures weekly—Monday, Wednesday, Friday, 1–2; honor course, 3 lectures weekly—Monday, Friday, 10–1, Wednesday, 2–3. English Literature—3 lectures weekly—Tuesday, Thursday, 12–1, Saturday, 11–12; extra, 3 lectures weekly—Monday, Wednesday, Friday, 12–1. Early English, 2 lectures weekly—Tuesday, Thursday, 2–3. English Language—3 lectures weekly—Tuesday, Thursday, 11–12; Saturday, 10–11.

B.—History—European: Gibbon, Decline and Fall; Hallam, Middle Ages. English: Hume, History of England; Hallam, Constitutional History of Eng-

Appendix F.

Reports from Professors.

land. English Literature: Chambers's Cyclopædia of English Literature; Craik, English Literature; Marsh, Lectures. English Language: Craik's Outlines.

C.—The lectures on History are illustrated by Bell's Chronological Tables, and Von Spruner's Maps.

D.—The students are generally examined on the subjects discussed at the previous lecture. In the classes of English literature and English languages exercises are prescribed once a week.

E.—Arts and Medicine.

F.—History, 2 students matriculated. Honor course, 2 students matriculated; English Literature—9 students matriculated; extra, 4 students matriculated; early English, 6 students matriculated; English Language, 27 students matriculated. Attendance regular.

G.—Discipline satisfactory.

H.—Condition of the department much improved by the carpets and furniture added to the private rooms of the Professors.

Wm. Rushton.

Report of the Professor of Modern Languages.

A.—There were three courses of lectures on the French language and literature during the session. 1st class of medical students; 2nd class of senior French; 3rd class of junior French.

1st. Each course continued during the whole Session:—namely, three terms.

2nd. The first term comprised 9 weeks; the second, 13 weeks; the third term, 5 weeks.

3rd. The lectures in each class were given three times a week—at 12, 1, and 2 o'clock.

B.—In the class of medical French, Achille Comte's *Lectures sur les Sciences* was the text-book: numerous extracts from Bichat, Lallemant, Chomel, &c, were read and dictated. In the Senior French class, Moliere's *Misanthrope*, Racine's *Shedre*, Fables de *Lafontaine*, and Demogeot's *Literature Française* were read. In the junior French, Moliere's *Avares*, Racine's *Esther*, and Demogeot's *Literature Francaise.*

C.—The lectures require no illustrations, &c.

D.—The method of tutorial instruction is employed, the students having portions of their text-books to prepare, as well as to write translations and exercises. Once a week, lectures on the Syntax, Comparative Grammar, and Literature, to each class.

E.—The students who attend the classes in modern languages belong to the faculties of Medicine, of Arts, and to the Engineering school.

F.—The general attendance of students in each class was satisfactory. The number of students in each class was, 25 in the medical; 23 in the senior, and 24 in the junior.

G.—The general conduct of the students during the session was very good.

H.—The condition of lecture-rooms, &c., very satisfactory.

R. de Vericour.

Report of the Professor of Natural Philosophy.

E.—The senior class of Experimental Physics was attended by students of the second year in Arts, and the second year in Engineering; the honor courses by students of the third year in Arts; Engineering Physics by students of third year in Engineering, and the junior class of Experimental Physics by students of the first year in medicine.

F.—Senior class of Experimental Physics 18; junior class of Experimental Physics 27; Mathematical Physics (honor) 2; Experimental Physics (honor) 3; Mathematical Physics (Engineering) 11; Engineering Physics, 12. The attendance in all was regular.

G.—The conduct of the students was satisfactory.

H.—The arrangements for carrying on the business of the department were satisfactory.

John England.

REPORT OF THE PROFESSOR OF CHEMISTRY.

Appendix F.

Reports from Professors.

A.—First course of 3 terms; first term of nine weeks; second of thirteen weeks, and third of five weeks. Three lectures per week, on Monday, Wednesday, and Friday, from 11 to 12. Second course of 3 months, on Monday, Wednesday, and Friday.

B.—First course; Systematic Chemistry, embraced the laws of combination; history of metallic and non-metallic substances; theories of organic Chemistry, and description of organic compounds. Text-books—Fownes, Graten, Kane, Miller, Regnault, Williamson, and Roscoe. The second course was conducted in the laboratory.

C.—Illustrated by diagrams, specimens, and experiments.

D.—In first course by lectures, and by explanations of difficulties after lectures to students. In the second course, each student works under the Professor's superintendence.

E.—Students of the Faculties of Medicine, Engineering, and a few from Arts, attend the course. Medical students alone attend the second.

F.—In the first course, 45 matriculated and 8 non-matriculated; and in the second or Practical Chemistry, 25 matriculated and 4 non-matriculated. The general attendance was good.

G.—General conduct good, and state of discipline also good.

H.—The department is well provided with supplies, fitments, and apparatus for the purposes of instruction. The ventilation of the public laboratory, complained of in my last report, is still most defective, and positively injurious to health.

J. BLYTH, M.D.

REPORT OF PROFESSOR OF CIVIL ENGEERING.

A.—1. Each course of lectures extends through the three terms. 2. In the first term, 9 weeks; second, 13; third, 5. 3. Three lectures weekly in each course. Students of first year, Monday, Wednesday, Friday, 10, A.M.; second year, Tuesday, Thursday, Saturday, 10, A.M.; third year, Monday, Wednesday, Friday, 12, noon. Office open Tuesday, Thursday, Saturday, from 10, A.M. to 2, P.M.

Total number of lectures:—

Students of first year,	64
" second year,	63
" third year,	66
In office,	60
Total,	253

B.—*First year.*—Descriptive Geometry; Orthographic Projection; Shadows; Isometric Projection; Perspective; Principles of Architecture; Geometry of the Oblique Bridge. Text-books:—Hall's Descriptive Geometry; Engineer and Machinist's Drawing Book; Rickman's Architecture; Buck on the Oblique Bridge. *Second year.*—Surveying, Levelling, and Mensuration. Text-books:—Rankin's Civil Engineering; Cotton's Manual of Railway Engineering; Williams' Geodesy. *Third year.*—Materials used in Construction; Principles of Construction of Bridges, Roads, Railways, Canals; Hydraulic Engineering; Strength of Materials; Principles of Construction of the chief machines employed by the Engineers. *Drawing Office.*—First year students are chiefly employed in drawing the problems given at lectures, and a few easy examples of their application. The second and third years' classes in making working drawings of examples of the subjects of lectures, and in mapping.

C.—Illustrated by reference to maps, drawings, and instruments.

D.—The tutorial and professorial methods of instruction are adopted, according to the subject of the lecture. Instruction is given in the field.

E.—Students in the department of Civil Engineering.

F.—Students of first year,	Mat.	21	Non-Mat.	–
" second year,	"	5	"	–
" third year,	"	13	"	–
		39		–

Appendix F.

Reports from Professors.

The majority of the students have attended tolerably regularly.

G.—Conduct of students very good.

H.—General condition of department good.

Alexander Jack.

Report of the Professor of Natural History.

A.—One course on Zoölogy and Botany. 1. The course consisted of 68 lectures, and extended over three terms. 2. The first term included 9; the second, 12; and the third, 3 weeks of lectures, 3. Three lectures weekly, at 3, P.M., on Mondays, Wednesdays, and Fridays.

B.—The course embraced lectures on the principles of Zoölogy and Botany, and on the Structure and Classification of Plants and Animals. The text-books used were Milne Edwards' Zoölogy, and Renfrey's Elementary Course of Botany.

C.—The lectures were illustrated by reference to specimens and diagrams. Herborizations were given during the third term.

D.—The professional method of instruction was chiefly employed.

E.—The lectures were attended by students of the third year in the Arts, and of the first year in Medicine.

F.—Five students in Arts (including one graduate), 25 in Medicine, and 6 non-matriculated students were present during the course. Ten of these attended *diligently*, 22 *duly*, while 4 were disqualified for insufficient attendance.

G.—Satisfactory.

As stated in last year's Report, save that the walls of the Zoölogical Museum have since been coloured, and that some of the locks of the cases have been repaired. The Professor would again complain of the very inadequate manner in which the Museum is still heated; the stoves placed there by the Board of Works being, moreover, of so bad a construction, that coal, ashes, and dust are freely dispersed therefrom, throughout the room; to the injury of the appearance of many of the specimens.

J. Reay Greene.

Report of the Professor of Mineralogy and Geology.

A.—The course of lectures on Mineralogy and Geology extended over the three terms of the Collegiate Session; the number of weeks of lectures in the first term being 9, in the second 14, and in the third 3.

Three lectures were given during the week; the days and hours being Tuesday and Thursday, from 2 to 3 P.M., and Saturday, from 10 to 11 A.M.

B.—The course, besides Mineralogy and Geology, also included Physical Geography and Palæontology. The books recommended as text-books on these several subjects were Hughes' Outlines of Physical Geography, Herschell's Physical Geography, Somerville's Physical Geography, Nicol's Manual of Mineralogy, Page's Elementary Text-book of Geology, Lyell's Elements and Principles of Geology, Jukes' Manual of Geology, Murchison's Siluria, and Owens' Palæontology.

C.—The course of lectures was illustrated by maps, sections, diagrams, specimens, and models.

D.—The mode of instruction was professional; and near the end of the Session, when not interfering with other departments of the College, field instruction was given in Pratical Geology.

E.—The students attending the lectures, with the exception of two, viz., one a B.A., and the other an Agricultural Student, belong to the first year's Engineering Class.

F.—The number of students attending the course was 21, all being matriculated except the Agricultural Student; and the attendance on the whole was very regular.

G.—The conduct of the student's was such as to meet with the Professor's approval.

H.—As regards fitments, supplies, cleanliness, and accommodation, these are now in such a state as to answer nearly all the requirements of the class.

Robert Harkness.

Appendix F.

Reports from Professors.

Report of the Professor of Logic and Metaphysics.

A.—On Logic and Metaphysics—1. Logic, 1 term; Metaphysics, 2 terms. 2. Two terms. Logic, Tuesdays and Thursdays, at 11 o'clock; Saturdays, at 9 o'clock. Metaphysics, Tuesdays and Thursdays, at 1 o'clock; Saturdays, at 10 o'clock.

B.—Logic, Deductive and Inductive—Aldrid, parts of Mill, Baynes, and Thompson. Metaphysics, History of Philosophy and Psychology; History of Philosophy of the University of France.

C.—No illustrations are used except such as are drawn or written on the board during the course of the lectures.

D.—Both the tutorial and professional systems are used.

E.—Logic, second years' students in Arts; Metaphysics, third years' students in Arts.

F.—Logic, 13; Metaphysics, 4. All matriculated; attendance very satisfactory.

G.—Conduct of the students in the class-rooms unexceptionable.

H.—The inconvenience with regard to lecture-rooms complained of in the last report, continued throughout the Session, but has been removed during the present Session.

G. J. Read.

Report of the Professor of Jurisprudence and Political Economy.

A.—1. Political Economy, 24 lectures; 2 terms. 2. Jurisprudence, 23 lectures; 2 terms. 3. Civil Law, 21 lectures.

B.—Political Economy—Rent, profit, and wages; commerce, taxation, currency, and banking. Text-books—J. S. Mill, Fawcett, Senior, Mills. Jurisprudence—Selections from the writings of Maine, Stephens, and lectures of the Professor. Civil Law—Sandars' Justinian.

C.—No.

D.—The tutorial and professional methods are both employed.

E.—In Political Economy; Arts Students; in other subjects, Law Students.

F.—In Political Economy 5 matriculated. In Jurisprudence 4 matriculated. In Civil Law 1 matriculated.

G.—Very good.

H.—The inconvenience with regard to lecture rooms, complained of in my last report, continued during the Session, but has been removed in the present Session.

R. H. Mills.

Report of the Professor of English Law.

A and B.—Three courses were given, comprising twenty-four lectures, to each of the first, second and third classes in English law. The subjects were, as prescribed, real property and conveyancing, in the class of the first year. Equity, bankruptcy, and personal property in the class of the second, and common and criminal law in the class of the third year. The text-books used in the several classes were Williams on Real Property, Williams on Personal Property, Smith on Contracts, Smith's Manual of Equity Jurisprudence, Story's Equity Jurisprudence, Smith's Leading Cases, Blackstone's Commentaries, and the several other books specified in the prospectus were recommended for perusal and study to the students.

C.—The several subjects were elucidated by precedents, and as far as possible by practical cases and references to the law and equity reports.

D.—Tutorial, and by exercises in the application of precedents, &c., and oral examination.

E.—Arts and Law.

F.—Four in the class of the first, one in the class of the second, and two in the class of the third year.

G.—The conduct of the students was unexceptionably good. The attendance in the class of the third year was not good or regular.

H.—Amendments in the law, made by recent statutes, render new editions of the several text-books essential, and which I have taken leave already to certify to the President.

Michael Barry.

Appendix F.

Reports from Professors.

REPORT of the PROFESSORS in charge of the Class of MEDICAL JURISPRUDENCE.

A.—Three months, during which thirty-six lectures were delivered. The days of lecture were Tuesday, Thursday, and Friday.

B.—The subjects chiefly enlarged upon were toxicology, chemical tests, the rules of evidence in legal procedure, infanticide, wounds, and insanity. The text-books Taylor and Guy, Beck and Pans, and Fonblanque, were also recommended for perusal by the students. The Leading Cases were referred to; for example, Lord Ferrer's case, the Duchess of Kingston's case, Hadfield's case, the Gardner and Douglas Peerage case, &c.

C. and D.—By experiments and lectures illustrated by them.

E.—Students of the faculty of medicine.

F.—There were twenty-three students in the class.

G.—The attendance, conduct, and discipline of the class were excellent.

H.—The class continues dependent on the chemical department for apparatus and the materials necessary for the toxicological portion of the course.

J. BLYTH, M.D.
MICHAEL BARRY, B.L.

REPORT of the PROFESSOR of ANATOMY and PHYSIOLOGY.

A.—Two courses delivered daily (Saturday excepted) during the Medical Session: Anatomy and Physiology at one o'clock; Anatomical Demonstrations at twelve o'clock.

B.—One course entitled Anatomy and Physiology, the other course Anatomical Demonstrations and Practical Anatomy. The dissections performed by the students are superintended by the Professor of Anatomy and by his assistants, Doctors SHINKWIN and JONES, Demonstrators of Anatomy.

The course of Anatomy and Physiology comprehends the following subjects: 1. Nature of life and organization; general description of the vital functions; general and special description of the textures of the human frame; development of tissues and other branches of Histology; composition of the fluids, viz., the blood, lymph, chyle, saliva, gastric juice, bile, &c. 2. Physiological Anatomy of the organs of support and locomotion, circulation, respiration, digestion, chylification, absorption, secretion, excretion, reproduction; the brain and its membranes; the spinal cord and membranes; the ganglia and nerves; the organs of touch, smell, vision, hearing, taste; organ of voice, &c. 3. The course comprehends all branches of human Physiology; various subjects comprised in it are elucidated by reference to Comparative Anatomy and Physiology.

The course of Structural Anatomy is illustrated by microscopical preparations, &c.

The course of Anatomical Demonstrations includes the special description of the bones, joints, ligaments, arteries, veins, nerves, membranes, and fasciæ; it also embraces Regional and Surgical Anatomy.

The text-books are the following, viz.:—Todd and Bowman on Physiological Anatomy; Carpenter's Physiology; Valentine's Physiology; Kirke's Handbook of Physiology; Quain's Anatomy; Harrison's Anatomy; Wilson's Vade Mecum; Gray's Anatomy; Ellis's Demonstrations; Corbett on the Arteries, &c.; Kölliker and Hassal on Microscopic Anatomy.

C.—The lectures are illustrated by recent and prepared dissections; by plates, diagrams, and anatomical preparations, &c.

D.—The students are examined *viva voce*, upon subjects treated of in the course; written replies to questions proposed have been resorted to only at the examinations held in October for Medical Scholarships, and at the Sessional Examinations which take place in May.

E.—These courses have been attended only by students of Medicine and Surgery.

F.—The course of Anatomy and Physiology was attended by 60 matriculated and 10 non-matriculated students.

The course of Demonstrations and Practical Anatomy by 57 matriculated and 7 non-matriculated students.

G.—The students have attended the lectures with great regularity.

Appendix F.

Reports from Professors.

H.—The Anatomical preparations, plates, charts, &c., are good, but there is much necessity for additions to the collections in the Anatomical Museum.

Accommodation has recently been much improved; the apartments are kept in a state of cleanliness.

J. H. Corbett.

Report of the Professor of Practice of Physic.

A.—Lectures on the Practice of Physic, delivered from November 1st to 30th of April following—three terms the first six weeks; the second and third varying with the time of Easter. Three lectures each week from three to four o'clock.

B.—The course embraces all the subjects of Internal Pathology, with the treatment and causes of the diseases. The text-books are Aitken's Science and Practice of Medicine and Watson's Lectures.

C.—Illustrated by pathalogical specimens and plates.

D.—The students are examined from time to time on the subjects of the course of lectures.

E.—Students of the Faculty of Medicine.

F.—Attended by 27 matriculated and 1 non-matriculated student.

G.—Nothing can exceed the good conduct and discipline of the students.

H.—There is as yet a deficiency in the pathological specimens caused by the burning of the College.

Denis Charles O'Connor, A.B., M.D.

Report of the Professor of Surgery.

A.—The courses of lectures to be continued for the three terms, on every Tuesday and Thursday from four to five o'clock, and on Saturday from one to two.

B.—Theory and Practice of Surgery; Druett's Manuel of Modern Surgery; Erichsen, Chelius, and Cyclopædia of Practical Surgery.

C.—Diagrams, specimens, the microscope, and operative surgery on the subject.

D.—Occasional class examinations.

E.—Faculty of Medicine.

F.—Matriculated, 34; non-matriculated, 4.

G.—The students' general conduct and state of discipline, without exception, very good.

H.—Department is deficient in supplies and fitments.

W. J. Tanner.

Report of the Professor of Midwifery.

A.—Midwifery. Six months' course. About 60 lectures. Three lectures weekly—Monday, Wednesday, and Friday, four o'clock.

B.—Midwifery. Physiology of the functions of reproduction and gestation. Parturition in its various bearings, theoretical and practical. Diseases of child-bed. Management and diseases of infants.

C.—Diagrams, preparations, models, instruments, &c.

D.—

E.—Medical.

F.—Matriculated students, 35; non-matriculated, 2; total, 37. General attendance good.

G.—Very good.

H.—Means of illustration not so full as could be desired.

J. R. Harvey, A.B., M.D.

Report of the Professor of Materia Medica.

A.—One six months' course. Three lectures weekly, on Tuesdays, Thursdays, and Saturdays, from 3 to 4 P.M.

B.—Lectures on Materia Medica and Therapeutics, comprising general Jamotology, Pharmacognosy, Pharmaco-dynamics, Pharmacy, Formulation and Posology. Hygiene and Balneology.

C.—Illustrated by diagrams, chalk drawings on the board, and microscopical demonstrations.

AppendixF.

Reports from Professors.

D.—By microscopical demonstrations and exhibition of specimens of the Materia Medica.

E.—Students of the medical faculty.

F.—Twenty-nine students. Attendance most regular.

G.—Conduct at lectures irreproachable. Greatest attention shown on the part of the students.

H.—Lecture-room into which I was hurried by the council altogether unfitted. Fire-place most inconvenient, the fire being close to the lecturer's back. No proper black-boards or place to hang diagrams. Windows so placed as to prevent students from seeing anything written on the boards, the whole rendering it impossible to lecture with any satisfaction.

PURCELL O'LEARY.

AppendixG.

List of successful Candidates.

APPENDIX G.

LIST of UNIVERSITY DEGREES, of DIPLOMAS, and of HONORS obtained by STUDENTS from QUEEN'S COLLEGE, CORK, at the UNIVERSITY COMMENCEMENTS in JUNE and OCTOBER, 1867; and of PEEL EXHIBITIONS awarded to STUDENTS of QUEEN'S COLLEGE, CORK, in OCTOBER, 1867.

DEGREE OF M.D.

Second Class honors:—Thomas Ryan, B.A.

Third Class:—Patrick Cremen and Hugh S. Kean.

Unclassed:
- Mark E. Anthony.
- John Barry.
- William F. Bennett.
- Robert D. Corbett.
- James W. Fisher.
- Edmond M. Fitzgerald.
- John F. Fitzpatrick.
- John B. Fitzsimon.
- David Forbes.
- Matthew M. Galway.
- Michael U. Greany.
- Thomas Kingston, B.A.

Unclassed—*continued:*
- Frederick Lyons.
- William H. Macnamara.
- Patrick Martin.
- Roslewin Morgan.
- James A. O'Brien.
- Charles G. Purcell.
- William N. Robinson.
- Francis E. Roche, B.A.
- John Roche.
- Thomas H. Sandeford, B.A.
- John O'Neill Sisk.

DEGREE OF M.CH.

- William F. Bennett.
- Robert D. Corbett.
- James W. Fisher.
- Edward M. Fitzgerald.
- John F. Fitzpatrick.
- Matthew M. Galway.
- William B. Johnston.
- Frederick Lyons.
- Patrick R. Martin.
- James A. O'Brien.
- Francis E. Roche, B.A.
- Thomas H. Sandeford, B.A.
- John O'Neill Sisk.

DEGREE OF M.A.

Second Class Honors:—John J. Foley, in Natural Science.

Unclassed:—Robert A. Jamison.

DEGREE OF B.A.

First Class Honors:—Arthur Anglin, in Mathemetical Science.

Second Class Honors:—

William J. Fitzgerald, in Ancient Classics.

Benjamin Hamilton, in Ancient Classics.

Stephen Ronane, Logic, Metaphysics, and Political Economy.

Unclassed:
- Robert A. Jamison.
- Alexis M'Auliffe.

Unclassed—*continued:*
- Maurice W. S. Moriarty.
- Francis Nunan.

DIPLOMA IN ENGINEERING.

Third Class:—Joseph H. Thornhill.

Unclassed:
- Robert French.
- William Good.
- Michael A. Lacy.

Unclassed—*continued.*
- Philip T. Large.
- Peter Mulcahy.

Appendix G.

List of successful Candidates.

FIRST UNIVERSITY EXAMINATION IN MEDICINE.

Unclassed:—
John M. M. Brown.
Philip Cogan.
William Boyle Coghlan, B.A.
Henry A. H. Cox.
George Finlay.
John B. Fitzsimon.
David Forbes.
David H. Hadden.
Arthur H. Hannon.
Denis Harrington.
Francis Healy.
William D. Isaac.
John Leonard.
John Lloyd.

Unclassed:—
Alex. S. Merrick.
John H. Miles.
Richard A. Mowle.
Patrick Murphy.
Francis Nunan.
Matthew D. O'Connell.
Michael O'Mally.
Stephen O'Sullivan.
Arthur V. Smyth.
Henry G. Smyth.
James Sweetman.
Alexander Trousdell.
Patrick L. Walsh.
Henry Weldon.

FIRST UNIVERSITY EXAMINATION IN ARTS.

First Class, with Honors:—
Arthur N. Anglin, and William G. Fitzgerald.

Third Class, with Honors:—
Stephen Ronane.
Benjamin Hamilton.

With Honors—*continued;*
John O'Driscoll.
Michael Molony.

Unclassed:—
Thomas H. Gillman.
Maurice W. S. Moriarty.

Unclassed—*continued:*
Thomas Power.

FIRST UNIVERSITY EXAMINATION IN ENGINEERING.

Second Class, with Honors.—Joseph H. Thornhill.

Unclassed:—
Thomas Belcher.
James Forrest.
Robert French.
William Good.

Unclassed—*continued:*
Richard W. Johnson.
Townsend Large.
Francis Martin.
Robert A. Thompson.

APPENDIX H.

Appendix H.

SPECIAL REPORT from the LIBRARIAN of the College.

Report of the Librarian.

The number of volumes in the Library at present is 18,529. They may be classified as nearly as possible as follows:—

Pure Mathematics,	603	History,	2,494
Mixed do.,	571	Biography,	542
Chemistry,	940	Antiquities,	276
Geology and Palæontology,	595	Geography, Voyages, and Travels,	598
Botany and Zoölogy,	1,438	Engineering,	453
Medical Science, &c.	2,012	Agriculture,	208
Theology,	324	Fine Arts,	194
Logic, Metaphysics, &c.,	420	Bibliography,	86
Jurisprudence and Political Economy,	518	Encyclopædias, &c.,	625
Education,	176	Total,	18,529
Law,	824		
Ancient Classical Literature,	1,853		
English Language and Literature,	1,281	Increase in number of volumes over last report,	398
Modern European Literature,	1,438		
Celtic Literature,	59	Of these, 9 volumes were presented.	

The number of students using the Library during the past Session was considerably larger than usual. Their conduct has always been very good. I have had no occasion to report any breach of discipline.

There are no losses to Library during the Session.

The complaint I made in last report respecting the Consulting Library has been only partially remedied. The damp is causing great injury to the valuable property there collected.

Appendix H.

Report of the Librarian.

I have been engaged for the past Session in a revision of the Library, and the preparation of a new catalogue So far as the lending department is concerned, this is nearly complete, and will prove a source of great convenience.

Cleanliness and order are properly attended to.

The College booksellers, Messrs. Hodges and Smith, continue to supply the orders in a satisfactory manner.

MATTHIAS O'KEEFFE, *Librarian.*

Appendix I.

Copies of Accounts furnished by Bursar.

APPENDIX I.

COPIES of the several ANNUAL ACCOUNTS furnished by the BURSAR, showing the FINANCIAL POSITION of the College.

No. 1.

GENERAL ANSTRACT of the ACCOUNT of the PRESIDENT or VICE-PRESIDENT, and BURSAR, of QUEEN'S COLLEGE, CORK, from 1st April, 1867, to 31st March, 1668.

DR. HEAD OF SERVICE (RECEIPTS).	£	s.	d.
To Balance on the 1st April, 1667,	1,307	12	2
,, Amount received from Paymaster of Civil Services,	8,336	12	5
,, Fees and Fines,	82	5	6
	£9,726	10	1

CR. HEAD OF SERVICE (PAYMENTS).	£	s.	d.
By amount paid for Salaries,	5,444	12	7
,, ,, ,, Scholars and Prizes,	1,377	17	6
,, ,, ,, Porters and Servants,	330	15	4
,, ,, ,, Additional Grant,	1,364	14	9
,, Special Grant (Mathematics),	36	18	0
,, Balance,	1	1	8
,, Balance indebted on 31st March, 1868,	1,169	16	5
	£9,725	16	3

No. 2.

ACCOUNT of EXPENDITURE of the ANNUAL PARLIAMENTARY GRANT of £1,000 for the Year ending 31st March, 1868.

DR.	£	s.	d.
By Balance to debit of Bursar from last year,	6	16	5
,, amount of Grant,	1,000	0	0
,, receipts from fees and fines,	82	5	0
	£1,069	3	5

CR.	£	s.	d.
By amount of expenditure on the several Departments :—			
1. Ancient and Modern Philology and Literature,	182	14	1
2. Mathematical, Physical, and Chemical Sciences,	131	19	3
3. Natural Sciences,	91	14	7
4. Engineering,	36	0	3
5. Medical Sciences,	111	0	9
6. Metaphysical, Legal and Economical Sciences,	64	4	4
7. Printing, Stationery, Advertising, Postage, and Office Expenses, including porter's clothing,	350	4	1
8. Heating and Lighting,	230	3	10
9. Botanic Garden and Grounds,	166	5	6
Total expenditure on account of Grant to March 31st, 1868,	£1,364	6	8
By amount of Credit as above,	£1,069	3	5
Balance to credit of Bursar on 31st April, 1868,	275	3	3

E. M. FITZGERALD, *Bursar.*

APPENDIX K.

REPORT OF THE VICE-PRESIDENT ON DISCIPLINE, AND REPORTS OF THE DEANS OF RESIDENCES OF THE SEVERAL RELIGIOUS DENOMINATIONS.

Reports of Vice-President and Deans of Residences.

RETURN OF THE VICE-PRESIDENT.

A.—The several departments of the College were in an efficient and satisfactory state.

B.—The order and discipline of the College were well maintained—there having occurred, during the Session, no breach of discipline calling for the intervention of the College Council.

I think it necessary to add to this report, for the information of Her Majesty, that during the whole of the Session, with the exception of a few days, I superintended the discipline of the College in the character of Acting President, in the absence of the President, as required by the statutes.

JOHN RYALL, *Vice-President.*

REPORT of DEAN of RESIDENCES for STUDENTS of the ESTABLISHED CHURCH.

2, South Terrace, Cork,
March, 24, 1868.

SIR,—In reply to your letter requesting me to furnish my annual report of the conduct of the students of the Queen's College, Cork, who belong to the Established Church, I beg leave to submit the following statement:—

I have had the honour of holding the office of Dean of Residences for more than eleven years. During all that time I have delivered lectures every week to the students who were willing to attend, and twenty-seven of them, more or less regularly, availed themselves of these lectures last year. Although the late charter recognised the Deans as the religious teachers, and beyond all doubt, gave the Council the power of allowing the Deans to lecture inside the walls of the College and made habitual neglect of religious instruction, one of the most serious offences that could be charged upon a student—in short, although the late charter made every provision for the religious education of the students belonging to the various denominations, the Council of the Queen's College, Cork, has steadily refused to allow the Deans of Residences any lecture rooms in the College. As the College is situate more than half a mile outside the city it is evident the students are put to a great inconvenience if they attend lectures anywhere in the city. The Council has refused to recognise in any way the general supervision of the Deans, and the consequence is, at present, if a student does not live in a licensed boarding house—and there is only one licensed house for over one hundred Protestant students, and this house accommodates only four—the consequence I say is, that from the time a student leaves the lecture room in the evening until he meets the Professor the next morning in the College he is *under no supervision whatever.* It is not true to say that the parents of the students are aware of this. The parents are under the impression that the Deans have some responsibility in looking after the students. Nothing can exceed the propriety of conduct of many of the students, but my deliberate conviction is that if some means be not adopted to bring the students under the supervision of the Deans the Queen's College, Cork, will soon deserve the reproach of being called a "godless College," and I shall be forced very reluctantly to sever my name from all connexion with it.

I venture to speak merely of what effects the life of the students while they are receiving their education in the College, but I might refer to many instances of grievous injustice done to the students in after-life, in consequence of the merely nominal existence of Deans. I am frequently applied to as Dean for a testimonial to the character of a particular student. It is all in vain for me to say that I know nothing of the character of that student, and equally in vain

Appendix K. — Reports of Vice-President and Deans of Residences.

to say that his character *may* be very good. Persons in the distance naturally believe that the Dean *ought* to know something of the character of the students—nominally, and I submit legally—committed to his care, and such persons as naturally believe that when a Dean has to say he knows nothing of the character of any student, it must be the fault of the student himself.

I have the honour to be, Sir, your obedient servant,

GEORGE WEBSTER, D.D.
Chancellor of Cork, and Dean of Residences to the Queen's College, Cork.

R. Kenny, Esq., Registrar.

REPORT of DEAN of RESIDENCES for STUDENTS of the PRESBYTERIAN CHURCH.

Sir Robert Kane.

SIR,—The Presbyterian students in attendance at the Queen's College, Cork, during the Session 1866-67, were attentive to their religious duties, and distinguished by good moral character. They prized their literary opportunities, and I believe largely profited by their studies.

I am, yours very truly,

WILLIAM MAGILL.

Cork, March 21st, 1868.

REPORT of the WESLEYAN DEAN of RESIDENCES.

Cork, 18 March, 1868.

DEAR SIR,—It gives me much pleasure to report that the conduct of the Wesleyan students in the Queen's College, Cork, so far as I have had opportunity of observing, has been extremely good, and some of the students, I am happy to say, have highly distinguished themselves in those studies.

C. L. GRANT,
Wesleyan Dean of Residences.

The Registrar of the Queen's College, Cork.